COMMON COUNCIL ORDINANCE COMMITTEE

REGULAR MEETING

February 20, 2018
7:00 p.m. – Room 231
Norwalk City Hall-125 East Avenue
Norwalk, CT

AGENDA

1.	**ROLL CALL**	
2.	**PUBLIC HEARING (possible action on):**	Snow and Ice Removal (Chapter 95)
3.	**PUBLIC HEARING DISCUSSION**	
4.	**PUBLIC COMMENT**	
5.	**ACCEPTANCE OF MINUTES:**	December 19, 2017
6.	**OLD BUSINESS (possible action on):**	Noise Ordinance (Chapter 68) Fracking Indemnification (Chapter 67A)
7.	**NEW BUSINESS: (possible action on):**	401 Defined Contribution Plan 457 Deferred Compensation Plan
8.	**DISCUSSION ITEM:**	
9.	**ADJOURNMENT**	

DPW – Snow and Ice Removal
Chapter 95

MEMORANDUM TO FILE

Date: February 15, 2018,
From: Brian Candela
RE: Public Hearing on Snow & Ice Removal re February 20, 2018 committee meeting

1) Enclosed please find the proposed language for 95-10 following the December 2017 meeting. Attached as Exhibit A are recommended changes to the ordinance by the law department.

§95-10 Snow and ice removal from sidewalks and driveways

A.

The provisions of Section 7-163a of the Connecticut General Statutes are hereby adopted and are set forth in Subsections B, C and D hereof.

B.

Notwithstanding the provisions of Section 13a-149of the Connecticut General Statutes or any other general or special act, the City shall not be liable to any person for injury to person or property due to the presence of ice or snow on a public sidewalk unless the City is the owner ~~of~~ or person in possession and control of land abutting such sidewalk, other than land used as a highway or street, provided that the City shall be liable for its affirmative acts with respect to any such sidewalk under its possession and control.

C.

The owner or person in possession and control of land abutting a public sidewalk shall have the same duty of care with respect to the presence of ice or snow on such sidewalk toward the portion of the sidewalk abutting his property as the City had prior to the effective date of this article and shall be liable to persons injured in person or property where a breach of said duty is the proximate cause of said injury.

D.

No action to recover damages for injury to person or property caused by the presence of ice or snow on a public sidewalk against a person who owns or is in possession and control of land abutting a public sidewalk shall be brought but within two years from the date when the injury is first sustained.

E.

Whenever the public sidewalk shall be wholly or partially covered by snow or ice, ~~it shall be the duty of the owner or person in possession and control of land abutting a public sidewalk to cause such sidewalk to be made safe and convenient by removing the snow therefrom~~ it shall be the duty of the owner and occupant in possession and control, jointly, of every parcel of real estate abutting a public sidewalk, whether the parcel of real estate is occupied by a structure or not, to keep such sidewalks free from snow and ice for the full paved width of such sidewalks within the first 24 hours immediately following the accumulation of such snow thereon or, in the case of ice, by covering the same with sand, salt, chemical ice melt or other suitable material within the first 24 hours following the accumulation of such ice, and then renewing such treatment as often as may be necessary to keep such sidewalk safe and convenient. In case of the failure or neglect of the owner or person in possession and control of land abutting the public sidewalk to comply with this subsection, the Director may cause the same to be done, and the expense thereof shall be collectible from the person so failing or neglecting, in an action of debt brought in the name of the City under this section. Any person who fails or neglects to comply with this subsection shall also be liable for a penalty or fine in an amount established in accordance with §90-4 of the Norwalk City Code, Approval of rates and fees.

F.

No person, firm or private corporation shall deposit, throw, place or strew, nor shall any person, firm, or private corporation cause to be deposited, thrown, placed or strewn, any snow or ice upon any streets, avenues, roadways, highways or sidewalks within the City. Any person, firm or private corporation who violates this subsection shall also be liable for a penalty or fine in an amount established in accordance with § 90-4 of the Norwalk City Code, Approval of rates and fees.

Exhibit A

§95-10 Snow and ice removal from sidewalks and driveways

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The provisions of Section 7-163a of the Connecticut General Statutes are hereby adopted and are set forth in Subsections B, C and D hereof.

B.

Notwithstanding the provisions of Section 13a-149of the Connecticut General Statutes or any other general or special act, the City shall not be liable to any person for injury to person or property due to the presence of ice or snow on a public sidewalk unless the City is the owner ~~of~~ or person in possession and control of land abutting such sidewalk, other than land used as a highway or street, provided that the City shall be liable for its affirmative acts with respect to any such sidewalk under its possession and control.

C.

The owner or person in possession and control of land abutting a public sidewalk shall have the same duty of care with respect to the presence of ice or snow on such sidewalk toward the portion of the sidewalk abutting his property as the City had prior to the effective date of this article and shall be liable to persons injured in person or property where a breach of said duty is the proximate cause of said injury.

D.

No action to recover damages for injury to person or property caused by the presence of ice or snow on a public sidewalk against a person who owns or is in possession and control of land abutting a public sidewalk shall be brought but within two years from the date when the injury is first sustained.

E.

~~Whenever the public sidewalk shall be wholly or partially covered by snow or ice, it shall be the duty of the owner or person in possession and control of land abutting a public sidewalk to cause such sidewalk to be made safe and convenient by removing the snow therefrom~~ It shall be the duty of each owner and/or occupant in possession and control, jointly, of every parcel of real estate abutting a public sidewalk, whether the parcel of real estate is occupied by a structure or not, to keep such sidewalks free from snow and ice for the full paved width of such sidewalks ~~within the first 24 hours immediately following the accumulation of such snow thereon~~ or, in the case of ice, by covering the same with sand, salt, chemical ice melt or other suitable material ~~within the first 24 hours following the accumulation of such ice~~, and then renewing such treatment as often as may be necessary to keep such sidewalk safe and convenient.

F.

In case of the failure or neglect of the owner or ~~person~~ occupant in possession and control of land abutting the public sidewalk to comply with this ~~subsection~~ordinance, as identified in subsection E, the Director may cause the same to be done, and the expense thereof shall be collectible from the person so failing or neglecting, in an action of debt brought in the name of the City under this section. It will be presumed that the owner and/or occupant, as identified in subsection E, has not complied with its obligations under this ordinance if the owner and/or occupant fails to remove snow and/or ice within a reasonable period of time after the cessation of the storm. Any person who fails or neglects to comply with this subsection shall also be liable for a penalty or fine in an amount established in accordance with §90-4 of the Norwalk City Code, Approval of rates and fees.

G.

No person, firm or private corporation shall deposit, throw, place or strew, nor shall any person, firm, or private corporation cause to be deposited, thrown, placed or strewn, any snow or ice upon any streets, avenues, roadways, highways or sidewalks within the City. Any person, firm or private corporation who violates this subsection shall also be liable for a penalty or fine in an amount established in accordance with § 90-4 of the Norwalk City Code, Approval of rates and fees.

Draft Meeting Minutes from 12/19/2017 Ordinance Committee Meeting

CITY OF NORWALK
ORDINANCE COMMITTEE
DECEMBER 19, 2017

ATTENDANCE: Eloisa Melendez, Chair; Michael Corsello; Thomas Livingston; Beth Siegelbaum; Doug Stern; Chris Yerinides

STAFF: Brian Candela, Corporation Counsel

OTHERS: Chris Torre, DPW Superintendent

1. ROLL CALL

Ms. Melendez called the meeting to order at 7:05PM and called the roll. A quorum was present.

2. PUBLIC HEARING (POSSIBLE ACTION ON)

There was no public hearing held.

3. PUBLIC HEARING DISCUSSION

There was no discussion.

4. PUBLIC COMMENT

No one from the public commented.

5 ACCEPTANCE OF MINUTES

November 14, 2017

** MR. LIVINGSTON MOVED TO APPROVE THE MINUTES.
** THE MOTION PASSED WITH THREE (3) IN FAVOR AND THREE (3) ABSTENTIONS (MS. SIEGELBAUM, MR. STERN AND MR. YERINIDES)

6. OLD BUSINESS

DPW Snow and Ice Removal

Mr. Torre said that the current language in the ordinance for snow and ice removal is very vague and Attorney Candela has done a great job incorporating the state statue into the proposed new ordinance language to help with enforcement and ADA accessibility. He said that the proposed language will better outline that the full width of the paved surface or concrete surface of the sidewalk. He also said that there is nothing in the current ordinance that states that it is illegal to throw or discharge snow from your driveway or sidewalk into the public right of way.

Mr. Corsello said that that proposed language will make it clear that both the tenant and the owner of the property are responsible. There was discussion ensued and it was decided that the proposed language should include "occupant in possession and control" Mr. Corsello suggested changing "joining" to "abutting" and removing "adjoining". Mr. Yerinides said in section B to change "of" to "or. Mr. Livingston said in section E to change "sad" to "sand". Mr. Corsello suggested in section "F" to change "who fails or neglects" to "who violates"

Mr. Livingston asked what the fines will be in the proposed ordinance. Mr. Torre said that the fee schedule will need to be changed because the current fee schedule does not have what the fee is for depositing snow into the roadway.

**** MR. LIVINGSTON MOVED TO APPROVE THE ITEM WITH THE CHANGES THAT WERE DISCUSSED TONIGHT AND SCHEDULE A PUBLIC HEARING FOR JANUARY 16, 2018 MEETING.**
**** THE MOTION PASSED UNANIMOUSLY.**

7. NEW BUSINESS

2018 Ordinance Committee Schedule

**** MR. CORSELLO MOVED TO APPROVE THE SCHEDULE.**
**** THE MOTION PASSED UNANIMOUSLY.**

Arts Commission Ordinance

Ms. Melendez said that Mr. Kydes had requested the proposed changes to make the Arts Commission consistent with the other commissions. Mr. Livingston also suggested that in section A to add "by the Mayor" after appointed.

**** MR. YERINIDES MOVED TO APPROVE THE ITEM WITH THE AMENDMENT.**
**** THE MOTION PASSED UNANIMOUSLY.**

8. DISCUSSION ITEM

Mr. Corsello said that there is currently no clear policy on who decides what plaques or monuments get displayed in our public parks. Mr. Candela said that he will research to see what other municipalities are doing.

9. ADJOURNMENT

**** MS. SIEGELBAUM MOVED TO ADJOURN**
**** MOTION PASSED UNANIMOUSLY**

The meeting adjourned at 7:50 PM

Respectfully submitted,

Dilene Byrd

Telesco Secretarial Services

Noise
Norwalk City Code
Chapter 68

MEMORANDUM TO FILE

Date: February 15, 2018
From: Brian Candela
RE: Noise Ordinance

For the benefit of the new members of the ordinance committee, materials from all 2017 meetings concerning the Noise ordinance were provided in preparation for the January 2018 ordinance committee meeting.[1]

Since all ordinance committee members have the documents concerning the Noise ordinance from 2017, the materials for the February 2018 meeting have been reduced to the following:

1) Attached please find a copy of the current Noise ordinance (Chapter 68) (Exhibit A).

2) In July 2017, the Common Council provided authorization to hire acoustical expert, Eric Zwerling of the Noise Consultancy, LLC, to assist the City of Norwalk in revising Chapter 68 of the Norwalk City Code (Noise Ordinance) pending Finance Department approval. Attached please find his fee schedule and curriculum vitae (Exhibit B).

[1] Unfortunately, this meeting was cancelled. These materials were provided to serve as a history of the Noise ordinance in 2017. These materials included all prior memos from 2017, the Noise ordinance, a noise level chart and information concerning acoustical expert, Eric Zwerling of the Noise Consultancy, LLC.

Exhibit A

City of Norwalk, CT
Wednesday, December 20, 2017

Chapter 68. Noise

§ 68-1. Short title.

This chapter shall be known as the "City of Norwalk Noise Control Ordinance."

§ 68-2. Purpose.

It is recognized that people have a right to and should be ensured an environment free from excessive sound and vibration that may jeopardize their health or safety or welfare or degrade the quality of life. This chapter is enacted to protect, preserve and promote the health, safety, welfare and quality of life for the citizens of Norwalk through the reduction, control and prevention of noise.

§ 68-3. Definitions.

The following definitions shall apply in the interpretation and enforcement of this chapter:

AMBIENT NOISE or BACKGROUND NOISE
Noise of a measurable intensity which exists at a point as a result of a combination of many distant sources individually indistinguishable.

COMMERCIAL ZONE
All commercial districts, business districts, as defined in the Zoning Regulations of the City of Norwalk,[1] and all uses associated therewith, either permitted as a right or as a special use.

COMMON COUNCIL
The Common Council of the City of Norwalk.

CONSTRUCTION
Any site preparation, assembly, erection, substantial repair, alteration or similar action, for or of public or private rights-of-way, structures, utilities or similar property.

CONSTRUCTION EQUIPMENT
Any equipment or device operated by fuel pneumatically or electric power used in construction or demolition work.

CONSTRUCTION SITE
Site where construction or demolition taxes place.

DAYTIME HOURS
The hours between 7:00 a.m. and 8:00 p.m., Monday through Friday, the hours between 8:00 a.m. and 8:00 p.m. on Saturday and the hours 9:00 a.m. through 8:00 p.m. on Sundays and federal and state holidays.

DECIBEL
A logarithmic unit of measure used in measuring magnitudes of sound. The symbol is dB. SPL (sound pressure level) is defined as:

$$SPL = 20 \log \frac{P}{Po} \text{ in dB}$$

Where

$$Po = 0.0002 \text{ microbar}$$

DEMOLITION

Any dismantling, intentional destruction or removal of structures, utilities, public or private right-of-way surfaces or similar property.

DIRECTOR OF HEALTH

The Health Director of the City of Norwalk.

DOMESTIC POWER EQUIPMENT

Not limited to, power saws, drills, grinders, lawn and garden tools and other domestic power equipment intended for use in residential areas by a home owner.

EMERGENCY

Any occurrence or set of circumstances involving actual or imminent physical trauma or property damage which demands immediate action.

EMERGENCY VEHICLE

Any motor vehicle authorized by the City of Norwalk to have sound warning devices such as sirens and bells which can lawfully be used when responding to an emergency.

EMERGENCY WORK

Work made necessary to restore property to a safe condition following an emergency, or work required to protect persons or property from exposure to imminent danger.

HEALTH BOARD

As defined in Chapter 57 in the City Code.

IMPULSE NOISE

Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

INDUSTRIAL ZONE

All industrial districts as defined by the Zoning Regulations of the City of Norwalk.

MOTOR VEHICLE

Per Section 14-1(26) of the Connecticut General Statutes, as amended.

MUFFLER

A device for abating sounds, such as those produced by escaping gases.

NIGHTTIME HOURS

The hours between 8:00 p.m. and 7:00 a.m., Sunday evening through Friday morning, Friday evening 8:00 p.m. through 8:00 a.m. Saturday morning and Saturday evening 8:00 p.m. through 9:00 a.m. Sunday morning. Saturday nighttime hours apply to state and federal holidays.

NOISE

Any sound, the intensity of which exceeds the standards set forth in § **68-5B** or **C** of this chapter.

NOISE DISTURBANCE

Any sound which unreasonably annoys, disturbs, injures or endangers the comport, repose, health, peace or safety of a person, or which causes injury or damage to property or business.

NOISE LEVEL

The sound pressure level in decibels as measured with a sound level meter using the A-weighting network. The level so read is designed "dB(A)" or "dBA."

NOISE SENSITIVE ZONE

Any area designated by the Norwalk Board of Health as a "noise-sensitive zone" where noise problems are likely to occur or known to exist. As a minimum requirement, said zone must include within its boundaries a school, hospital, house of worship, day-care center, nursing home, public library, senior citizen center, residence or court.

PERSON

Any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency or political or administrative subdivision of the state or other legal entity of any kind.

PREMISES

Any buildings, structure, land, or portion thereof, including all appurtenances, and shall include yards, lots, courts, inner yards and real properties without buildings or improvements owned or controlled by a person. The emitter's premises includes contiguous publicly dedicated street and highway rights-of-way, all road rights-of-way and waters of the state.

PROPERTY LINE

That real or imaginary line along the ground surface and its vertical extension which separates real property owned or controlled by any person from contiguous real property owned or controlled by another person, and separates real property from the public right-of-way.

PUBLIC RIGHT-OF-WAY

Any street, avenue, boulevard, highway, sidewalk, alley, park, waterway, railroad or similar place which is owned or controlled by a governmental entity.

RECREATIONAL VEHICLE

Any internal combustion-engine powered vehicle which is being used for recreational purposes.

RESIDENTIAL ZONE

All city-owned property used for recreational or educational purposes and all residential districts and any commercial district when used for residential purposes, as defined in the Zoning Regulations of the City of Norwalk, and all uses permitted therewith either as a right or as a special use.

SOUND

A transmission of energy through solid, liquid or gaseous media in the form of vibrations which constitute alterations in pressure or position of the particles in the medium and which, in air, evoke physiological sensations, including, but not limited to, an auditory response when impinging on the ear.

SOUND LEVEL METER

An instrument used to take sound level measurements and which should conform, as a minimum, to the operational specifications of the American National Standards Institute for Sound Level Meters S1.4-1971 (Type S2A).

SOUND PRESSURE LEVEL

Twenty times the logarithm to the base 10 of the ratio of the pressure of a sound to the reference pressure of 20 micronewtons per square meter (20 X 10 - 6 Newtons/meter^2), and is expressed in decibels (dB).

[1] *Editor's Note: See Ch. **118**, Zoning.*

§ 68-4. Noise level measurement procedures.

For the purpose of determining noise level as set forth in this chapter, the following guidelines shall be applicable:

A. All personnel conducting sound measurements shall be trained in the current techniques and principles of sound measuring equipment and instrumentation.

B. Instruments used to determine sound level measurements shall conform to the sound level meters as defined by this chapter.

C. The general steps listed below shall be followed when preparing to take sound level measurements:

(1) The instrument manufacturer's specific instructions for the preparation and use of the instrument shall be followed.

(2) The sound level meter shall be calibrated before and after each set of measurements.

(3) When measurements are taken out of doors, a wind screen shall be placed over the microphone of the sound level meter as per the manufacturer's instructions.

(4) The sound level meter shall be placed at an angle to the sound source as specified by the manufacturer's instructions and at least four feet above the ground. It shall be so placed as not to be interfered with by individuals conducting the measurements.

(5) Measurements shall be taken at a point that is located about one foot beyond the boundary of the emitter's premises within the receptor's premises. The emitter's premises includes his/her individual unit of land or ground of contiguous parcels under the same ownership as indicated by public land records.

D. Multiple uses. Where multiple uses exist within a given noise zone, the least restrictive land use category for the emitter and receptor shall apply regarding the noise standards.

§ 68-5. Noise levels.

A. It shall be unlawful for any person to emit or cause to be emitted any noise beyond the boundaries of his/her premises in excess of the noise levels established in this chapter.

B. Noise level standards.

(1) No person in a residential zone shall emit noise beyond the boundaries of his/her premises exceeding the levels stated herein and applicable to adjacent residential, commercial or industrial zones:

Receptor's Zone

			Residential	
Emitter's Zone	**Industrial**	**Commercial**	**(day)**	**(night)**
Resi- dential	62 dBAs	55 dBAs	55 dBAs	45 dBAs

(2) No person in a commercial zone shall emit noise beyond the boundary of his/her premises exceeding the levels stated herein and applicable to adjacent residential, commercial or industrial zones:

Receptor's Zone

			Residential	
Emitter's Zone	**Industrial**	**Commercial**	**(day)**	**(night)**
Com- mercial	62 dBAs	62 dBAs	55 dBAs	45 dBAs

(3) No person in an industrial zone shall emit noise beyond the boundary of his/her premises exceeding the levels stated herein and applicable to adjacent residential, commercial or industrial zones:

Receptor's Zone

			Residential	
Emitter's Zone	**Industrial**	**Commercial**	**(day)**	**(night)**
Industrial	70 dBAs	66 dBAs	61 dBAs	51 dBAs

C. High background noise levels and impulse noise.

(1) In those individual cases where the background noise levels caused by sources not subject to this chapter exceed the standards contained herein, a source shall be considered to cause excessive noise if the noise emitted by such source exceeds the background noise levels by five dBA's, provided that no source subject to

the provisions of this chapter shall emit noise in excess of 80 dBA's at any time, and provided that this section does not decrease the permissible levels of other sections of this chapter.

(2) No person shall cause or allow the emission of impulse noise in excess of 80 dB's peak sound pressure level during the nighttime to any residential noise zone.

(3) No person shall cause or allow the emission of impulse noise in excess of 100 dB's peak sound pressure level at any time to any zone.

D. Exclusions. These levels shall not apply to noise emitted by or related to:

(1) Natural phenomena.

(2) Any bell or chime from any building clock, school or church.

(3) Any siren, whistle or bell lawfully used by emergency vehicles or any other alarm systems used in an emergency situation.

(4) Warning devices required by OSHA or other state or federal safety regulations.

(5) Farming equipment or farming activity.

E. Exemptions. The following shall be exempt from this chapter these regulations subject to special conditions as spelled out and to the general prohibition of § **68-6**:

(1) Noise generated by any construction equipment which is operated during daytime hours.

(2) Noise created as a result of, or relating to, an emergency.

(3) Noise from domestic power equipment, such as, but not limited to, power saws, sanders, grinders, lawn and garden tools or similar devices operated during daytime hours, provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises that result therefrom.

(4) Noise from snow removal equipment at any time shall be exempted provided that such equipment shall be maintained in good repair so as to minimize noise, and noise discharged from exhausts shall be adequately muffled to prevent loud and/or explosive noises therefrom.

(5) Noise from demolition work conducted during daytime hours.

(6) Noise created by any aircraft flight operations which are specifically preempted by the Federal Aviation Administration.

(7) Noise created by any recreational activities which are permitted by law and for which a license or permit has been granted by the City, including, but not limited to, parades, sporting events, concerts and firework displays.

(8) Noise created by refuse and solid waste collection, provided that the activity is conducted during daytime hours.

(9) Noise created by the normal and ordinary activities of the Department of Public Works or any taxing district utility, including but not limited to the following: street sweeping, snow and ice control, maintenance of the sanitary sewer collection system, maintenance of storm drainage systems, solid waste collection and disposal, maintenance of traffic control devices and operation of off-street parking facilities.

(10) Noise created by public school construction.

§ 68-6. Prohibited activities.

A. General prohibition. It shall be unlawful for any person to make, continue or cause to be made or continued any loud, unnecessary and unreasonable noise.

B. The following activities are prohibited:

(1) Vehicle horns. No person shall at any time sound any horn or audible signal device of a motor vehicle unless it is necessary as a warning to prevent or avoid a traffic accident.

(2) Emissions from stationary or idling mobile sources. No mobile source engine shall be allowed to operate for more than three consecutive minutes when the mobile source is not in motion except as follows:

(a) When a mobile source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;

(b) When it is necessary to operate heating, cooling or auxiliary equipment installed on the mobile source when such equipment is necessary to accomplish the intended use of the mobile source;

(c) To bring the mobile source to the manufacturer's recommended operating temperature;

(d) When the outdoor temperature is below 20°F;

(e) When the mobile source is being repaired.

(3) Exhaust discharge. No person shall discharge into the ambient air the blow-down of any steam vent of the exhaust of any stationary internal combustion engine or air compressor equipment, unless such discharge is through a muffler as defined by § **68-3** of this chapter or through an apparatus providing equal noise reduction and that meet noise level requirements identified in § **68-5B**.

(4) Construction. No person shall at any time operate construction equipment on the construction or demolition site or carry on any construction or demolition during nighttime hours, except in an emergency in the interest of public safety and then only with a permit from the Director of Health or his designee and subject to all other applicable rules and regulations provided by state and local law, and said permit may not exceed a period of three days.

(5) Blasting. No person shall at any time carry on blasting between the hours of 5:00 p.m. and 8:00 a.m. except in an emergency in the interest of public safety and then only with a permit from the Director of Health or his designee and subject to all other applicable rules and regulations provided by state and local law and the permit may not exceed a period of three days.

(6) Leaf blowers. No person shall at any time operate a leaf blower during nighttime hours in a residential zone.

(7) Nighttime. In-house construction. No person shall carry on nighttime in-house construction unless that construction activity takes place solely within the structure and emits no sound or noise outside of the structure.

§ 68-7. Motor vehicles.

A. All motor vehicles operated within the limits of the City of Norwalk shall be subject to the noise standards and decibel levels set forth in the regulations authorized in Sections 14-80a-1a through 14-80a-10a, inclusive, of the Regulations of Connecticut State Agencies.

B. No sound-amplifying devices on or within motor vehicles shall emit noise in excess of the noise levels as specified in § **68-5B** or **C**.

C. This section dealing with motor vehicle noise shall be enforced by the Chief of Police and/or his designated subordinates.

§ 68-8. Recreational vehicles; loudspeakers; sound reproduction systems.

A. No person shall create or cause to be created any unreasonably loud or disturbing noise due to the operation of a recreational vehicle. A noise shall be deemed to be unreasonably loud and a violation of this chapter when the noise so generated exceeds the noise level standards set forth in § **68-5B** or **C**.

B. The Norwalk Board of Health may designate noise-sensitive zones where noise problems are particularly likely to occur and likely to cause unusual problems. Loudspeakers and public address systems may be prohibited in such noise-sensitive zones by the Norwalk Board of Health.

C. Operating, playing or permitting the operation or playing of any radio, television, phonograph or similar device which reproduces or amplifies sounds in such a manner as to create a noise disturbance is prohibited.

§ 68-9. Inspections.

A. For the purpose of determining compliance with the provisions of this chapter, the Chief of Police or his designated representative is hereby authorized to make inspections of all noise sources and to take measurements and make tests whenever necessary to determine the quantity and character of noise. In the event that any person refuses or restricts entry and free access to any part of a premises or refuses inspection, testing or noise measurement of any activity, device, facility or process where inspection is sought, the Chief of Police and/or designated representative may seek from the appropriate court a warrant without interference, restriction or obstruction, at a reasonable time, for the purpose of inspecting, testing or measuring noise.

B. It shall be unlawful for any person to refuse to allow or permit the Chief of Police or his designated representative free access to any premises when the Chief of Police or his designated representative is acting in compliance with a warrant for inspection and order issued by the appropriate court.

C. It shall be unlawful for any person to violate the provisions of any warrant or court order requiring inspection, testing or measurement of noise sources.

D. No person shall hinder, obstruct, delay, resist, prevent in any way, interfere or attempt to interfere with any authorized person while in the performance of his/her duties under this chapter.

§ 68-10. Violations and penalties.

A. Any person who violates any provision of this chapter or any rule or regulation in force pursuant thereto shall be subject to a fine of no more than $99, and $250 for each subsequent offense within one year of the last offense. Each violation shall constitute a separate offense.
[Amended 3-28-2017]

B. Action pursuant to Subsection A of this section shall not be a bar to enforcement of this chapter, rules and regulations in force pursuant thereto and orders made pursuant to this chapter, by injunction or other appropriate remedy, and the Department of Health shall have the power to institute and maintain in the name of the City of Norwalk any and all such enforcement proceedings.

C. Nothing in this chapter shall be construed to abridge, limit or otherwise impair the right of any person to damages or other relief on account of injuries to persons or property, and to maintain any action or other appropriate proceeding therefor.

§ 68-11. Variances; promulgation of regulations; contracts.

A. Variances.

(1) Any person living or doing business in Norwalk may apply to the Director of Health for a variance from one or more of the provisions of the chapter, which are more stringent than the Connecticut Department of Environmental Protection regulations for the control of noise, provided that the applicant supplies all of the following information to the Director of Health:

(a) Location and nature of activity.

(b) The time period and hours of operation of said activity.

(c) The nature and intensity of the noise that will be generated.

(d) Any other information required by the Director of Health.

(2) No variance from these regulations shall be issued unless it has been demonstrated that:

(a) The proposed activity will not violate any provisions of the Connecticut Department of Environmental Protection regulations.

(b) The noise levels generated by the proposed activity will not constitute a danger to the public health.

(c) Compliance with the regulations constitutes an unreasonable hardship on the applicant.

(3) Following receipt and review of an application for a variance, the Director of Health shall fix a date, time and location for a hearing on such application.

(4) The Director of Health shall cause the applicant to publish at his/her own expense all notices of hearings and other notices required by law, including, but not limited to, notification of all abutters of record and property owners within 200 feet.

(5) Within 65 days of the receipt of the record of the hearings on a variance application, the Director of Health shall issue his/her determination regarding such application. All such decisions shall briefly set forth the reasons for the decision.

(6) The Director of Health may, at his/her discretion, limit the duration of any variance granted under this chapter. Any person holding a variance and needing an extension of time may apply for a new variance under the provisions of this chapter. Any such application shall include a certification of compliance with any condition imposed under the proposed variance.

(7) The Director of Health may attach to any variance any reasonable conditions he/she deems necessary and desirable, including, but not limited to:

(a) Requirements for the best practical noise control measures to be taken by the owner or operator of the source to minimize noise during the period of the variance.

(b) Requirements for periodic reports submitted by the applicant relating to noise, to compliance with any other conditions under which the variance was granted or to any other information the Director of Health deems necessary.

(8) The filing of an application for a variance shall operate as a stay of prosecution, except that such stay may be terminated by the Director of Health upon application of any party if the Director of Health finds that protection of the public health so requires.

(9) In any case where a person seeking a variance contends that compliance with any provision of these regulations is not practical or possible because of the cost involved either in installing noise control equipment or changing or curtailing the operation in any manner, he/she shall make available to the Director of Health such financial records as the Director of Health may require.

(10) A variance may include a compliance schedule and requirements for periodic reporting op increments of achievement of compliance.

(11) Failure to rule on the application in the designated time shall constitute approval of the variance.

B. Any person aggrieved by the decision of the Director of Health with respect to any variance may appeal to the Common Council within a period of 10 days of the reception of the Health Director's decision.

C. The Director of Health is herewith authorized to recommend regulations from time to time not inconsistent with the State Public Health Code and/or the regulations of the State Department of Environmental Protection regarding noise which shall, upon approval by the Common Council and State of Connecticut Department of Environmental Protection, become effective therewith.

D. Contracts. Any written agreement, purchase order or contract whereby the City of Norwalk is committed to an expenditure of funds in return for work, labor, services, supplies, equipment, materials, or any combination thereof, shall not be entered into unless such agreement, purchase order or instrument contains provisions that any equipment or activities which are subject to the provisions of this chapter will be operated, constructed, conducted or manufactured without violating the provisions of the chapter.

§ 68-12. Severability.

If any clause, sentence, paragraph or part of this chapter, or the application thereof to any person, firm, corporation or circumstances, shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, said judgment shall not affect, impair or invalidate the remainder of this chapter and the application of such provision to other persons, firms, corporation or circumstances, but shall be confined in its operation to the clause, paragraph or part thereof directly involved in the controversy in which said judgment shall have been rendered and to the person, firm, corporation or circumstances involved. It is hereby declared to be the legislative intent of this body that this chapter would have been adopted had such invalid provisions not been included.

§ 68-13. Conflict with other regulations.

In the event that provisions or standards of this chapter or adopted under this chapter shall conflict with regulations or standards set by the State of Connecticut Department of Environmental Protection, the more strict standard shall apply.

§ 68-14. Word usage.

In construing this chapter, masculine or neuter pronouns shall be substituted for those of feminine form and vice versa, and the plural of the singular and the singular of the plural, shall be substituted in any case which the context may require.

§ 68-15. When effective.

This chapter shall be effective 10 days from its passage.

Exhibit B

THE NOISE CONSULTANCY, LLC
309 VAN NESTE ROAD
FLEMINGTON, NEW JERSEY 08822

THENOISECONSULTANCY

(908) 237-0298 noiseconsultancy@aol.com www.noiseconsultancy.com

SENT VIA EMAIL

May 3, 2017

Brian Candela, Esq.
Assistant Corporation Counsel
City of Norwalk
125 East Avenue
Norwalk, CT 06851

Dear Mr. Candela,

This letter is in response to your request for a proposal to assist you in amending Norwalk's Noise Code at Chapter 68, as we discussed on the phone yesterday. I've reviewed Chapter 68 and can see where its application could present practical difficulties.

As I noted in our phone conversation, in my capacity as President of the Noise Consultancy, I've assisted jurisdictions across the breadth of the US to amend or rewrite their noise ordinances. Please review my resume for a list of clients. I have also served as an expert witness in courts from New Orleans to New York City, including Federal Court.

In my capacity as Director of the Rutgers University Noise Technical Assistance Center, in the past 26 years I've trained maybe 8,000 noise enforcement investigators throughout the country from Alaska to Florida, as well as internationally. Thus, I am well aware of the capabilities of field enforcement officers.

Based upon our conversation, I will propose two approaches to offering my consulting services: as an hourly rate or as a comprehensive lump sum. Your decision may be based upon the extent of the services you desire.

HOURLY RATE: I can provide my services on an hourly basis, if you desire to perform much of the work in-house, with my assistance in reviewing that work. The rate for my services is $220/hour, and travel is invoiced at $165/hour. On-site consultation will be invoiced at $1,800/day, plus travel.

INCLUSIVE PROPOSAL:

- One day of on-site consultation, scheduled at a mutually convenient date;
- Present an educational seminar on the basics of sound as it applies to noise regulation including: the various approaches to noise ordinances (i.e., nuisance ordinances v. performance ordinances) and the practical benefit/drawbacks to each approach, followed by an open discussion to determine the specific desires of Norwalk regarding what the jurisdiction desires to regulate or exempt from the ordinance;

- Tour the jurisdiction, specifically the problem areas;
- Conduct sound level measurements of problem sources &/or conduct a demonstration of the methodology of sound level measurement for enforcement purposes;
- Review whatever relevant documents are provided by the City of Norwalk;
- Draft a new or amended Noise Ordinance, as appropriate, based upon all information gathered;
- Perform whatever redrafting is necessary, until the new or amended Ordinance is adopted, or declared legislatively dead;
- Remain available for consultation via phone or e-mail.

The inclusive price for these services is $9,500. Expenses are additional, and would include, if necessary, a hotel.

Additional days of consecutive on-site consultation will be invoiced at $1,400/day plus expenses. Additional days of non-consecutive on-site consultation will be invoiced at $1,800/day plus travel time and expenses.

If Norwalk desires training for your investigators, I will submit a separate proposal from the Rutgers University Noise Technical Assistance Center for such services.

If you have any questions whatever regarding this proposal, please don't hesitate to call me.

I look forward to the possibility of working with the City of Norwalk, and assisting you in your effort to deliver a better quality of life to your residents.

Sincerely,

Eric M. Zwerling, M.S., INCE, ASA
President

ERIC M. ZWERLING, M.S., INCE, ASA

Rutgers University Noise Technical Assistance Center
14 College Farm Road
New Brunswick, NJ 08901

The Noise Consultancy, LLC
309 Van Neste Rd
Flemington, NJ 08822

CURRENT POSITIONS

1991-Present	*Director* - Noise Technical Assistance Center Department of Environmental Sciences Rutgers - The State University of New Jersey
1999-Present	*President* - The Noise Consultancy, LLC Noise Consultant/ Expert Witness (Since 1992) [Expert for the Defendants, City of New York Law Department -in- Robert Turley, *et al.*, - against- Rudolph Guiliani, *et al.*,]
1993-Present	*Noise Enforcement Expert* - New Jersey Department of Environmental Protection. Contracted (as Director of the RNTAC) to provide technical expertise on noise related issues to the NJDEP and the State of New Jersey
1998-Present	*Instructor* - "Noise Hazards" in 'Fundamentals of Industrial Hygiene'. University of Medicine and Dentistry of New Jersey , School of Public Health, Office of Public Health Practice
1998-Present	Committee Member - S12 Working Group 41, Model Community Noise Ordinances. Acoustical Society of America
2001-Present	Committee Member - Technical Study Group on Community Noise Institute of Noise Control Engineering
1994-Present	*Instructor* - "Community Noise" in 'Environment and Public Health Course," Rutgers Continuing Education Program, Cook College Office of Continuing Professional Education.
1992-2005	*Adjunct Professor*- Rutgers University Department of Environmental Sciences. Course: 375:336 'Community and Occupational Noise'
1998-2000	Commissioner - Franklin Township (NJ) Environmental Commission
2010-Present	Board of Education, Chair – Green Committee Readington Township, New Jersey

PROFESSIONAL AFFILIATIONS

Member - Acoustical Society of America
Member – Institute of Noise Control Engineering

EDUCATION

ABD Ph.D. Candidate
Rutgers - the State University of New Jersey
Department of Environmental Sciences

Occupational Hearing Conservationist
Council for Accreditation in Occupational Hearing Conservation.

Graduate Certificate in Environmental Ethics -
Department of Philosophy, University of Georgia.

B.S., M.S. University of Georgia.

JURISDICTIONAL CERTIFICATIONS

Approved Noise Control Investigator
New Jersey Department of Environmental Protection
Pursuant to N.J.A.C. 7:29 -2.11(a)3

Approved Noise Consultant
New York City Department of Environmental Protection
Pursuant to N.Y.C.A.C. Section 24-231

Approved Instructor
State of Michigan
Department of Licensing and Regulatory Affairs
Bureau of Construction Codes

AWARDS

1997 *Advisor of the Year Award*
Rutgers College Student Activities Advisory Council
Faculty Advisor - Students for Environmental Awareness

2016 *Sustainable Raritan Award*
Outstanding Achievement in Public Education
Sustainable Raritan River Collaborative and Rutgers' Sustainable Raritan River Initiative

PUBLICATIONS

Zwerling, E.M. 2015. Proposed Noise Standard for Wind Turbine Generators on Farms. State Agriculture Development Committee, New Jersey Department of Agriculture.

Zwerling, E.M, A. Myers, C. Shamoon. 2012. Analysis of the "Plainly Audible" Standard for Noise Ordinances. Proceedings of Inter- Noise 2012. Institute of Noise Control Engineering.

Zwerling, E.M., C. Shamoon. 2010. Proactive Regulation Engenders Creative Innovation - Quieting the Jackhammer. Proceedings of Noise-Con 2010. Institute of Noise Control Engineering.

Szulecki, S., E. Zwerling, C. Anderson, B. Turpin. 2010. Modeling with CadnaA to estimate the probability of awakening associated with train horns. Proceedings of Noise-Con 2010. Institute of Noise Control Engineering.

Zwerling, E.M., C. Anderson, S. Szulecki, F. Maimone, B. Turpin. 2009. Study of Train Noise in Teaneck, NJ. USEPA Agreement Number: X-83245701-0

Zwerling, E.M. 2005. Regulatory Scheme For Noise Enforcement In New Jersey . *Invited paper.* Journal of the Acoustical Society of America.V.118, No. 3, Pt 2 of 2, Sept. 2005, p. 1849.

Zwerling, E.M. 2004. Training as a Critical Component of Successful Noise Enforcement Programs. *Invited paper.* Journal of the Acoustical Society of America.V.115, No. 5, Pt 2 of 2, May 2004, p. 2568.

Zwerling, E.M. 2004. Noise Enforcement in Cities. *Invited paper.* Journal of the Acoustical Society of America.V.115, No. 5, Pt 2 of 2, May 2004, p. 2593.

Zwerling, E.M. 2002. Characteristics of Successful Local Noise Enforcement Programs. *Invited paper.* Journal of the Acoustical Society of America.V.112, No. 5, Pt 2 of 2, Nov. 2002, p. 2375.

Zwerling, E.M. 2002. Boom Car and Boom Box Code Drafting. The Quiet Zone. Spring 2002.

Zwerling, E.M. 2002. Hearing Protection. In *Encyclopedia of Public Health,* ed. Lester Breslow. Macmillan Reference USA.

Zwerling, E.M. 2001. Vehicle Enforcement. Rutgers Noise Technical Assistance Center. Developed for North Salem, NY

Zwerling, E.M. 2000. Regulation of Amplified Sound Sources. Proceedings of Noise-Con 2000. Acoustical Society of America / Institute of Noise Control Engineering. Newport Beach , CA. December 3-5, 2000 .

Zwerling, E.M. 2000. State of Michigan Model Noise Ordinance. Proceedings of Michigan Municipal League Annual Convention/ Michigan Association of Municipal Attorneys Annual Meeting. September 28-30, 2000 , Macinac Island , MI .

Zwerling, E. M. Contributing Editor. 1991-Present. Community Noise Enforcement. Rutgers Noise Technical Assistance Center.

Zwerling, E. M. Contributing Editor. 1998. Vehicle Sound Reproduction Enforcement. Rutgers Noise Technical Assistance Center. Developed for the City of Rochester, New York

Zwerling, E.M. 1997. Community Noise Enforcement: A Mature Technology. Hearing Rehabilitation Quarterly. 22:4, 4-8+.

Zwerling, E.M., D. Pinto, P. Hanna, J. Lepis, B. Turpin. 1997. Local Noise Enforcement Options and Model Noise Ordinance *With Pre-Approved Language for the State of New Jersey* . Rutgers Cooperative Extension Publication #E215.

Zwerling, E.M. 1997. Community Noise Infosheet. Environmental and Occupational Health Sciences Institute. Public Education and Risk Communication Division.

Zwerling, E.M. 1996. Turning Down the Volume: Effective Strategies for Community Noise Enforcement. The Police Chief. V. 63, Dec. 53-59.

Zwerling, E. M. & B. J. Turpin. 1996. Community Noise Enforcement: Reviving a Moribund Program or Developing One Anew. Proceedings of Noise-Con 96, The 1996 National Conference on Noise Control Engineering. 955-960.

Zwerling, E.M. 1996. Community Noise Pollution Certification and Assistance. Home page for Rutgers Noise Technical Assistance Center. http://www.envsci.rutgers.edu/org/rntac/

RESEARCH PROJECTS (at Rutgers University, as P.I. or Co-P.I.)

"Assistance Regarding Noise Standards for Wind Turbines on Farms," Granting Agency: New Jersey State Agricultural Development Commission (SADC), 2011 - 2015.

"Assistance Regarding Noise Standards for Photovoltaic Installations on Farms," for New Jersey State Agricultural Development Commission (SADC), 2010.

"Railroad Noise in Teaneck, New Jersey" Granting Agency: United States Environmental Protection Agency, 2005 - 2009.

"Road Noise Educational Outreach Program," Granting Agency: New Jersey Department of Transportation, 2002.

CONFERENCE PRESENTATIONS

Community Noise Control: Reviving a Moribund Program or Creating One Anew. International Code Council 2013 Conference. Atlantic City, NJ. September 30, 2013.

Emerging Noise Issues: Emergency Generators and Beach Bars. *Invited Presentation.* New Jersey Environmental Health Association Annual Public Health Conference. Atlantic City , NJ March 5, 2013.

Must we regulate civility? Yes, unfortunately. But, is it effective? *Invited lecture.* stillspotting ( ) nyc . Guggenheim Museum. New York City. October 9, 2012.

Analysis of the "Plainly Audible" Standard for Noise Ordinances. Proceedings of Inter- Noise 2012. Institute of Noise Control Engineering. August 22, 2012.

Proactive Regulation Engenders Creative Innovation - Quieting the Jackhammer. *Invited Paper.* Proceedings of Noise-Con 2010. Institute of Noise Control Engineering. Baltimore, MD, April 20, 2010.

Environmental Health and Noise: Issues and Answers. *Invited Presentation.* New Jersey Environmental Health Association Annual Public Health Conference. Atlantic City , NJ March 3, 2008.

Noise Primer For Legal Professionals. *Invited Presentation.* New York State Bar Association Environmental Law Section Fall Meeting. Saratoga Springs , New York . October 13, 2007.

How to Control Noise Pollution in Your Community. *Invited Presentation.* 90th Annual Conference - New Jersey State League of Municipalities. Atlantic City , NJ November 15, 2005.

Regulatory Scheme for Noise Enforcement in New Jersey . *Invited Paper.* 150th Meeting - Acoustical Society of America . Minneapolis , MN October 17-21, 2005.

Noise Enforcement in Cities. *Invited Paper.* 147th Meeting - Acoustical Society of America . New York , New York May 24-28, 2004.

Training as a Critical Component of Successful Noise Enforcement Programs. *Invited Paper.* 147th Meeting - Acoustical Society of America . New York , New York May 24-28, 2004.

Community Noise Impacts. *Invited Presentation.* Topics in Public Health. New Jersey Department of Health and Senior Services. April 16, 2003.

Characteristics of Successful Local Noise Enforcement Programs. *Invited Paper.* First Pan-American/Iberian Meeting on Acoustics. Jointly Sponsored: Acoustical Society of America , the Iberoamerican Federation of Acoustics and the Mexican Institute of Acoustics. Cancun , Mexico .Dec 2-6, 2002.

Community-Based Environmental Noise Management, *Invited Panelist;* The Role of State and Local Governmental Agencies in Noise Abatement and Control, *Invited Panelist.* Inter-Noise 2002, The 2002 International Congress and Exposition on Noise Control Engineering. Dearborn , MI Aug. 19-21, 2002.

Community Noise Regulation and Enforcement: Theory and Practice. American Association of Code Enforcement. 4th Semi-Annual Education Conference. Bowie , MD. May 1-3, 2002.

Regulation of Amplified Sound Sources. Noise-Con 2000. Acoustical Society of America/Institute of Noise Control Engineering. Newport Beach , CA. December 3-5, 2000.

Writing and Enforcing a Noise Ordinance. Michigan Municipal League Annual Convention.
Nuts and Bolts of Writing a Noise Ordinance. Michigan Association of Municipal Attorneys Annual Conference. Macinac Island , MI , September 28-30, 2000.

Municipal Noise Regulation - Theory and Practice. International Municipal Lawyers Association, Mid-Year Seminar. Washington , D.C. April 9-11, 2000.

Effective Strategies for Community Noise Enforcement:

- Michigan Municipal League 9th Annual Education Conference. Mt. Pleasant, MI. March 11, 1998.
- The Association of Towns of the State of New York , Annual Meeting, Educational Training Courses. New York City , February 16, 1998 .
- American Association of Code Enforcement 8th Annual Business and Educational Conference. Hagerstown , MD , October 20-25, 1997.

Community Noise Enforcement: Reviving a Moribund Program or Developing One Anew. Noise-Con '96, The 1996 National Conference on Noise Control Engineering, Seattle, WA, September 29-October 2, 1996.

NOISE ENFORCEMENT CERTIFICATION COURSES TAUGHT

Community Noise Enforcement
Vehicular Noise Enforcement
Vehicle Sound Reproduction Enforcement
Motor Sports Ordinance Enforcement
Octave Band Analysis for Enforcement Purposes

New Jersey :
Certification and recertification - every three months, 1991 to present.

On-Site:
New Rochelle, NY; Jacksonville, FL (four times); Long Beach, NY (three times); Everett, WA; St. Augustine, FL (three times), Seattle, WA (twice); Neptune Beach, FL; Gainesville, FL; Anchorage, AK (twice); Binghamton, NY (twice); Washington State Association of Code Enforcement (three times); Ft. Collins, CO; Shelter Island, NY (four times); New York City, NY [NYC DEP, NYPD, NYC Parks, NYC DDOC] (eight times); Rochester, NY; Newport, RI; Platekill, NY; Traverse City, MI; DeKalb County, GA (four times); Twinsburg, OH; Sandusky, OH; North Salem, NY; Honolulu, HI; Lafayette, LA (twice); Philadelphia, PA (twice); Barbados, West Indies (twice); Collier County, FL (three times); Walton County, FL (three times); Greenville County (SC); Vancouver B.C. (three times); Panama City Beach, FL (twice); Matanuska-Susitna Borough, AK; Union, OH; Ithaca, NY

ON-SITE ORDINANCE DEVELOPMENT WORKSHOPS

Lafayette, LA; Traverse City, MI; Plattekill, NY; St. Augustine, FL; Charleston County, SC; Lansing, MI; DeKalb County, GA; Walton County, FL, Overland Park, KS; Greenville County, SC, Decatur, AL; Yonkers, NY; Ossining, NY; Newport RI; Monroe County, FL; Fort Lauderdale, FL; Panama City Beach, FL

PARTIAL LIST OF CLIENTS

City of New York Law Department; City of Philadelphia Law Department, Environmental & Regulatory Compliance Division; U. S. State Department; City of New York Police Department; Bergen County (NJ) Utilities Authority; New York City Department of Environmental Protection; New York State Office of Attorney General; McDonald's Corporation, Lafayette (LA) Consolidated Government; McGlinchey Stafford (New Orleans); Gaeta Recycling, Inc.; National Ecology; Browning Ferris Industries; Township of Manalapan (NJ); Kansas State Legislature; Readington Township (NJ); City of Lansing (MI); City of Tacoma (WA); City of St. Augustine (FL); Atlantic Development and Management Corp.; CareMatrix Corporation; County of Charleston (SC); DeKalb County (GA); Greenville County (SC); Ethicon, Inc.; City of Yonkers (NY); Walton County (FL); City of Overland Park (KS); City of Newport (RI); City of Ossining (NY); Franklin Township (NJ); Alliance to Save Southern Ulster's Rural Environment; Roche Molecular Systems; Wheelabrator, Inc.; Monroe County (FL); City of Juneau (AK); Township of Branchburg (NJ); City of Eugene (OR); Union County United (PA); City of Fort Lauderdale (FL); City of Panama City Beach (FL); Stop & Shop Supermarket Company; Track Racket (Millville, NJ); Green Lawn Cemetery (Columbus, OH); Nissan Motor Company, Ltd.; City of Union (OH); City of Ithaca (NY); SA Engineering; Upper Deerfield Township (NJ)

Fracking Waste

MEMORANDUM TO FILE

Date: February 15, 2018
From: Brian Candela
RE: Fracking Waste for the February 20, 2018 committee meeting

1) **Enclosed please find documents concerning Fracking Waste**

Pursuant to Middletown's ordinance, a municipality has the right to protect the welfare of its residents pursuant to Connecticut General Statutes §§ 7-148(c)(7)(H), 7-148(c)(4)(H), 7-148(c)(7)(H)(xi), 7-148(c)(8), and 7-148(c)(7)(H)(ii). Middletown's ordinance would prohibit the application, introduction, storage, disposal, sale, acquisition, transfer, handling, treatment, and/or processing of natural gas or oil waste.

Attached also please find the Town of South Windsor's ordinance and the City of Milford's ordinance. These ordinances were recently approved.

Public Act, 14-200, which took effect on July 1, 2014, established a moratorium on certain activities associated with fracking waste in Connecticut. The moratorium lasts until the Department of Energy and Environmental Protection (DEEP) adopts regulations. The moratorium applies to any person accepting, receiving, collecting, storing, treating, disposing of, or transferring between vehicles or modes of transportation any fracking waste. The wastes covered by the act include wastewater, wastewater solids, brine, sludge, drill cuttings, or any other substances used or generated in the process of fracking. Additionally, the act also prohibits the sale, manufacture, distribution, or use of de-icing and dust suppression products derived from or containing fracking waste until DEEP adopt regulations controlling these products.

Vermont is the only state to ban fracking. Connecticut and Massachusetts are considering legislation as well.

City of Middletown, CT
Monday, July 10, 2017

Chapter 171. Hazardous Waste

§ 171-10. Storage, disposal or use of oil and gas drilling and extraction waste prohibited.

[Added 1-3-2017 by Ord. No. 01-17]

A. Purpose. The prohibition of oil and gas drilling and extraction wastes are hereby declared necessary for the protection of the health, property, safety and welfare of the residents of the City of Middletown pursuant to C.G.S. § 7-148(c)(7)(H), C.G.S. § 7-148(c)(4)(H); C.G.S. § 7-148(c)(7)(H)(xi), C.G.S. § 7-148(c)(8), and § 7-148(c)(7)(H)(ii) as amended.

B. Definitions. For the purposes of this section, the following terms, phrases, and words shall have the meanings given here, unless otherwise clearly indicated by the context:

APPLICATION
The physical act of placing or spreading natural gas waste or oil waste on any road or real property located within the City of Middletown.

HYDRAULIC FRACTURING
The fracturing of underground rock formations, including shale and nonshale formations, by manmade fluid-driven techniques for the purpose of stimulating oil, natural gas, or other subsurface hydrocarbon production.

NATURAL GAS EXTRACTION ACTIVITIES
All geologic or geophysical activities related to the exploration for or extraction of natural gas, including, but not limited to, core and rotary drilling and hydraulic fracturing.

NATURAL GAS WASTE

1) Any liquid or solid waste or its constituents that is generated as a result of natural gas extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants;

2) Leachate from solid wastes associated with natural gas extraction activities;

3) Any waste that is generated as a result of or in association with the underground storage of natural gas;

4) Any waste that is generated as a result of or in association with liquefied petroleum gas well storage operations; and

5) Any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes.

OIL EXTRACTION ACTIVITIES

All geologic or geophysical activities related to the exploration for or extraction of oil, including, but not limited to, core and rotary drilling and hydraulic fracturing.

OIL WASTE

1) Any liquid or solid waste or its constituents that is generated as a result of oil extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants;

2) Leachate from solid wastes associated with oil extraction activities; and

3) Any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes.

C. Prohibitions.

(1) The application of natural gas waste or oil waste, whether or not such waste has received beneficial use determination or other approval for use by DEEP (Department of Energy and Environmental Protection) or any other regulatory body, on any road or real property located within the City for any purpose is prohibited.

(2) The introduction of natural gas waste or oil waste into any wastewater treatment facility within or operated by the City is prohibited.

(3) The introduction of natural gas waste or oil waste into any solid waste management facility within or operated by the City is prohibited.

(4) The storage, disposal, sale, acquisition, transfer, handling, treatment, and/or processing of waste from natural gas or oil extraction is prohibited within the City.

D. Provision to be included in bids and contracts related to the construction or maintenance of publicly owned and/or maintained roads or real property within the City.

(1) All bids and contracts related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the City shall include a provision stating that no materials containing natural gas or oil waste shall be utilized in providing such a service.

(2) All bids and contracts related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and/or maintained road or real property within the City shall include a provision stating that no materials containing natural gas or oil waste shall be provided to the City.

(3) The following statement, which shall be a sworn statement under penalty of perjury, shall be included in all bids related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and or maintained road or real property within the City and all bids related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the City: "We ________ hereby submit a bid for materials, equipment and/or labor for the City of Middletown. The bid is for bid documents titled ________. We hereby certify under penalty of perjury that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor agent in connection with the bid; nor will the undersigned bidder or any sub-contractor, agent or vendor agent thereof apply any natural gas waste or oil waste to any road or real property within the City of Middletown as a result of the submittal of this bid if selected."

E. Penalties for offenses. In response to a violation of this section, the City may require remediation of any damage done to any land, road, building, aquifer, well, watercourse, air quality or other asset, be it public or private, within the City of Middletown. The City may also impose fines in the amount of $250 per violation per day for any violation of this section and any other remedies allowable under the law.

TOWN OF SOUTH WINDSOR
ORDINANCE PROHIBITING NATURAL GAS WASTE AND OIL WASTE FROM NATURAL GAS EXTRACTION ACTIVITIES OR OIL EXTRACTION ACTIVITIES WITHIN THE TOWN

Sec. 1. Purpose.

The purpose of this Ordinance is to protect, the health, safety, welfare and property of the residents of the town of South Windsor pursuant to the provisions of Section 7-148 of the Connecticut General Statutes by prohibiting the waste associated with drilling and extraction of natural gas and oil from being used for any purpose on any road or real property in the Town of South Windsor.

Sec. 2. Definitions.

For the purposes of this Ordinance, the following words, terms and phrases shall have the meanings respectively ascribed to them by this section, except where the context clearly indicates a different meaning:

a) *"Application"* shall mean the physical act of placing or spreading natural gas waste or oil waste on any road or real property located within the Town of South Windsor.

b) *"Hydraulic fracturing"* shall mean the fracturing of underground rock formations, including shale and non-shale formations, by man-made fluid-driven techniques for the purpose of stimulating oil, natural gas, or other subsurface hydrocarbon production.

c) *"Natural gas extraction activities"* shall mean all geologic or geophysical activities related to the exploration for or extraction of natural gas, including, but not limited to, core and rotary drilling and hydraulic fracturing.

d) *"Natural gas waste"* shall mean: 1) any liquid or solid waste or its constituents that is generated as a result of natural gas extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants; 2) leachate from solid wastes associated with natural gas extraction activities; 3) any waste that is generated as a result of or in association with the underground storage of natural gas; 4) any waste that is generated as a result of or in association with liquefied petroleum gas well storage operations; and 5) any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes.

e) *"Oil extraction activities"* shall mean all geologic or geophysical activities related to the exploration for or extraction of oil, including, but not limited, to, core and rotary drilling and hydraulic fracturing.

f) *"Oil waste"* shall mean: 1) any liquid or solid waste or its constituents that is generated as a result of oil extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants; 2) leachate from solid wastes associated with oil extraction activities; and 3) any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes.

Sec. 3. Prohibitions.

a) The application of natural gas waste or oil waste, whether or not such waste has received Beneficial Use Determination or other approval for use by DEEP (Department of Energy & Environmental Protection) or any other regulatory body, on any road or real property located within the Town for any purpose is prohibited.

b) The introduction of natural gas waste or oil waste into any wastewater treatment facility within or operated by the Town is prohibited.

c) The introduction of natural gas waste or oil waste into any solid waste management facility within or operated by the Town is prohibited.

d) The storage, disposal, sale, acquisition, handling, transfer, treatment and/or processing of natural gas waste or oil waste from natural gas extraction activities or oil extraction activities is prohibited within the Town.

Sec. 4. Provision to be included in bids and contracts related to the construction or maintenance of publicly owned and/or maintained roads or real property within the Town.

a) All bids and contracts related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the Town shall include a provision stating that no materials containing natural gas or oil waste shall be utilized in providing such a service.

b) All bids and contracts related to the purchase or acquisition of materials to be used to construct, or maintain any publicly owned and/or maintained road or real property within the Town shall include a provision stating that no materials containing natural gas or oil waste shall be provided to the Town.

c) The following statement, which shall be a sworn statement under penalty or perjury shall be included in all bids related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and/or maintained road or real property within the Town and all bids related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the Town:

> "We ____________ hereby submit a bid for materials, equipment and/or labor for the Town. The bid is for bid documents titled ________________. We hereby certify under penalty of perjury that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor agent in connection with the bid; nor will the undersigned bidder or any sub-contractor; agent or vendor agent

thereof apply any natural gas waste or oil waste to any road or real property within the Town as a result of the submittal of this bid if selected."

Sec. 5. Penalties.

This ordinance shall apply to any and all actions occurring on or after the effective date of this ordinance. In response to a violation of this ordinance, the Town is empowered to:

a) issue "Cease and Desist" orders demanding abatement of the violation;

b) seek any appropriate legal relief, including immediate injunctive relief, as a result of any violation of this ordinance;

c) file a complaint with any other property authority;

d) require remediation of any damage done to any land, road building, aquifer, well, watercourse, air quality or other asset, be it public or private, within the Town, the Town may recoup from the offending person(s), jointly and severally, all costs, including experts, consultants and reasonable attorney's fees, that it incurs as a result of having to prosecute or remediate any infraction of this ordinance.

e) Issue citations in the amount of $250 per violation per day, or such other amount as is allowed by law, and seek any other remedies allowable under the law.

Sec. 6 Enforcement.

a) The Town Manager, or a designee, is hereby empowered and authorized to, if appropriate, issue orders and other directives under this Ordinance and refer matters in connection therewith to the Town's Counsel. The South Windsor Police Department and/or any other designee(s) of the Manager are also authorized to enforce this Chapter. In addition to any equitable relief available, this Chapter shall be enforced by citations issued by said designated officers or employees.

b) Town employees, officers and officials are not required to personally carry out testing of waste products to determine chemical contents, as this work may be done via contacting the State of Connecticut Department of Energy and Environmental Protection or the appropriate analytical laboratory or laboratories. If appropriate, the Town's Manager, or a designee, may request that the State of Connecticut, Department of Energy and Environmental Protection pursue civil penalties allowable under the law.

c) A citation hearing procedure is hereby established pursuant to C.G.S. § 7-152(a). The Town Manager shall appoint one or more citation hearing officers, other than police officers or employees or persons who issue citations, to conduct the hearings authorized by this section. The citation hearing procedure provisions of C.G.S. § 7-152c, Subsections (c) through (g), inclusive, are hereby adopted by reference as if fully set forth herein.

Sec. 7. Severability.

If any clause, sentence, paragraph, subdivision, section or part of this Ordinance or the application thereof to any person, individual, corporation, firm, partnership, entity or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, effect or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this Ordinance or in its application to the person, individual, corporation, firm, partnership, entity or circumstance directly involved in the controversy in which such order or judgment shall be rendered. To further this end, the provisions of this Ordinance are hereby declared to be severable.

Sec. 8. Conflicts with other Ordinances or Codes.

In any case where a provision of this Ordinance if found to be in conflict with a provision of any other ordinance or code of the Town, the provision that establishes the higher standard for the protection of the health, safety, welfare and property of the residents of the Town shall prevail. In any case where a provision of this Ordinance is found to be in conflict with a provision of any other ordinance or code of the Town, which other ordinance or code establishes a lower standard for the protection of the health, safety, welfare and property of the residents of the Town, the provisions of this Ordinance shall be deemed to prevail, and such other ordinances or codes are hereby declared to be repealed to the extent that they may be found in conflict with this Ordinance.

Sec. 9 Transportation.

Nothing in this ordinance shall be interpreted to ban the transportation of any product or by-product described herein on any roadway or real property with the Town of South Windsor.

THIS ORDINANCE WILL TAKE EFFECT IN ACCORDNACE WITH THE TOWN CHARTER

AT THE BOARD OF ALDERMEN MEETING HELD ON OCTOBER 2, 2017, THE FOLLOWING ORDINANCE WAS APPROVED.

AN ORDINANCE ESTABLISHING CHAPTER 12, GAS AND OIL EXPLORATION, ARTICLE I, STORAGE, DISPOSAL OR USE OF HYRDAULIC FRACTURING WASTE PROHIBITED, SECTIONS 12-1 THROUGH 12-5 OF THE CITY OF MILFORD CODE OF ORDINANCES.

WHEREAS, the City of Milford (hereinafter "City") wishes to protect the public health, safety and welfare of all of its citizens and guests; and

WHEREAS , oil and gas drilling and extraction wastes have been recognized as harmful and dangerous to the environment; and

WHEREAS, Connecticut General Statutes §7-148(c)(4)(H), §7-148 (c)(7)(H)(xi), §7-148(c)(8), and §7- 148(c)(7)(H)(ii), as amended, provide that the City may limit and regulate such wastes for the protection of the health, property, safety and welfare of the residents of the City.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Aldermen of the City of Milford that Article 12 of the Code of Ordinances, is hereby established as follows:

Sec. 12-1. Definitions.

As used in this Chapter 12, the following terms shall have the meanings indicated:

APPLICATION

The physical act of placing or spreading natural gas waste or oil waste on any road or real property located within the City of Milford.

CITY

The City of Milford.

HYDRAULIC FRACTURING

The fracturing of underground rock formations, including shale and non-shale formations, by manmade fluid-driven techniques for the purpose of stimulating oil, natural gas, or other subsurface hydrocarbon production.

NATURAL GAS EXTRACTION ACTIVITIES

All geologic or geophysical activities related to the exploration for or extraction of natural gas, including, but not limited to, core and rotary drilling and hydraulic fracturing.

NATURAL GAS WASTE

A. Any liquid or solid waste or its constituents that is generated as a result of natural gas extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants;

B. Leachate from solid wastes associated with natural gas extraction activities;

C. Any waste that is generated as a result of or in association with the underground storage of natural gas;

D. Any waste that is generated as a result of or in association with liquefied petroleum gas well storage operations; and

E. Any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes .

OIL EXTRACTION ACTIVITIES

All geologic or geophysical activities related to the exploration for or extraction of oil, including, but not limited, to, core and rotary drilling and hydraulic fracturing.

OIL WASTE

A. Any liquid or solid waste or its constituents that is generated as a result of oil extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals, or other contaminants;

B. Leachate from solid wastes associated with oil extraction activities; and

C. Any products or byproducts resulting from the treatment, processing, or modification of any of the above wastes .

Sec. 12-2. Prohibitions.

(a) The application of natural gas waste or oil waste, whether or not such waste has received Beneficial Use Determination or other approval for use by DEEP (Department of Energy & Environmental Protection) or any other regulatory body, on any road or real property located within the City for any purpose is prohibited.

(b) The introduction of natural gas waste or oil waste into any wastewater treatment facility within or operated by the City is prohibited.

(c) The introduction of natural gas waste or oil waste into any solid waste management facility within or operated by the City is prohibited.

(d) The storage, disposal, sale, acquisition, transfer, handling, treatment, and/or processing of waste from natural gas or oil extraction is prohibited within the City.

<u>Sec. 12-3. Provision to be included in bids and contracts related to the construction or maintenance of publicly owned and/or maintained roads or real property within the City.</u>

(a) All bids and contracts related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the City shall include a provision stating that no materials containing natural gas or oil waste shall be utilized in providing such a service.

(b) All bids and contracts related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and/or maintained road or real property within the City shall include a provision stating that no materials containing natural gas or oil waste shall be provided to the City.

(c) The following statement, which shall be a sworn statement under penalty of perjury, shall be included in all bids related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and or maintained road or real property within the City and all bids related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the City:

"We _______________ hereby submit a bid for materials, equipment and/or labor for the City of Milford. The bid is for bid documents titled ___________. We hereby certify under penalty of perjury that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor agent in connection with the bid; nor will the undersigned bidder or any sub-contractor, agent or vendor agent thereof apply any natural gas waste or oil waste to any road or real property within the City of Milford as a result of the submittal of this bid if selected. "

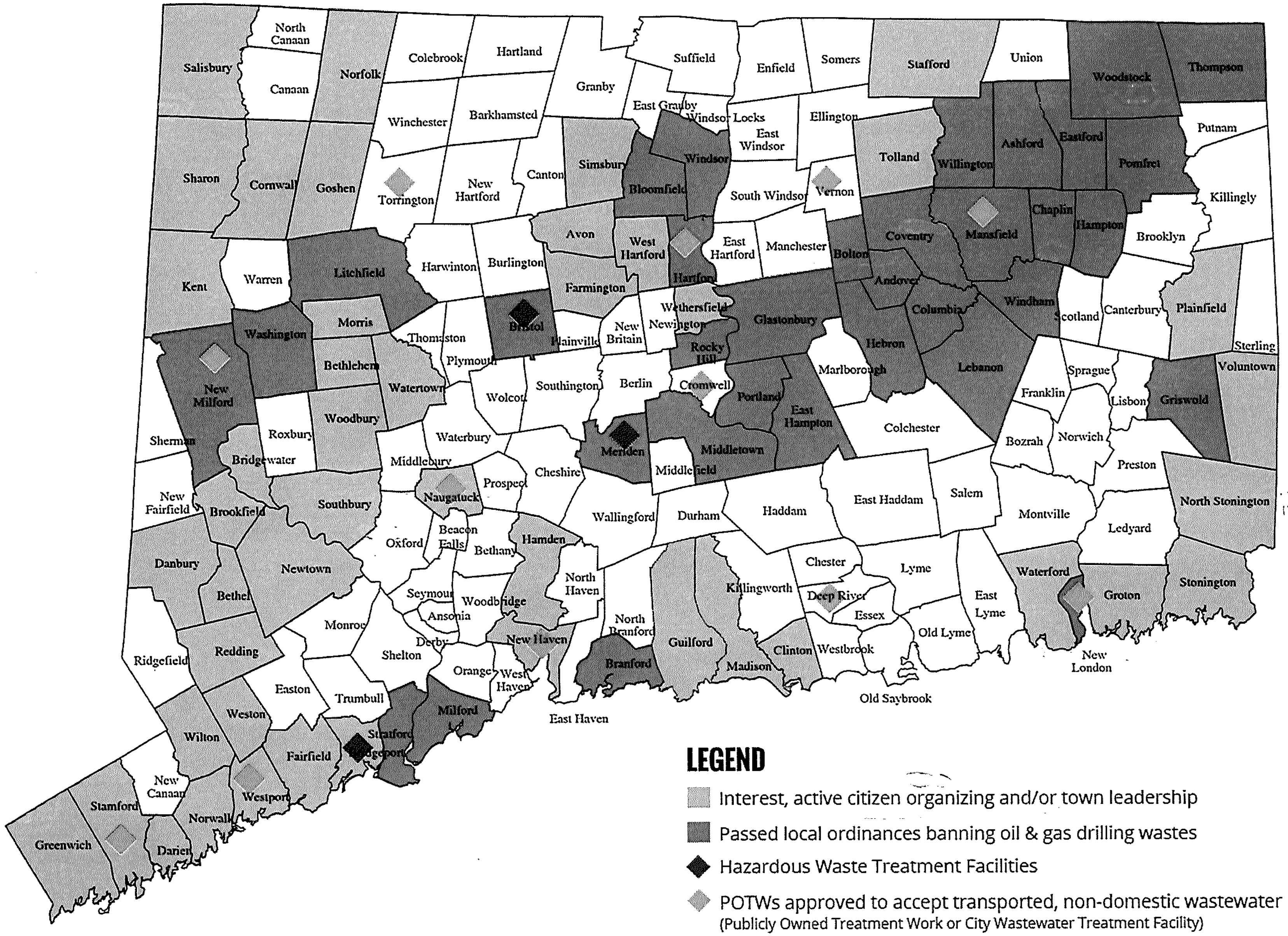
<u>Sec. 12-4. Penalties.</u>

This ordinance shall apply to any and all actions occurring on or after the effective date of this ordinance. The City is empowered to a) issue cease and desist orders demanding abatement of any violation of the prohibitions and provisions stated in this ordinance; b) seek any appropriate legal relief, including immediate injunctive relief, as a result of any violation of this ordinance; c) file a complaint with any property authority; and d) require remediation of any damage to any land, road, building, aquifer, well, watercourse, air quality or other asset, be it public or private, within the City of Milford. The City may also impose fines in the amount of two hundred and fifty dollars ($250.00) per violation per day for any violation of this ordinance and any other remedies allowable under the law. The City may recoup from the offending person(s), jointly and severally, all costs, including, but not limited to, contractors, experts, consultants and reasonable attorney's fees, that it incurs as a result of having to prosecute or remediate any infraction of this ordinance.

Sec. 12-5. Severability.

If any clause, sentence, paragraph, subdivision, section or part of this ordinance or the application thereof to any person, individual, corporation, firm, partnership, entity or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, effect or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this ordinance or in its application to the person, individual, corporation, firm, partnership, entity or circumstance directly involved in the controversy in which such order or judgment shall be rendered. To further this end, the provisions of this Chapter are hereby declared to severable.

Dated at Milford, CT this 3rd day of October 2017.
Attest: Joanne M. Rohrig, City Clerk



BASE MAP COURTESY OF THE CONNECTICUT DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

Bold Type = Towns with Boards of Selectmen = 18

34 CT towns & cities - **Andover, Ashford,** Bloomfield, **Bolton,** Branford, Bristol, **Chaplin, Columbia, Coventry, Eastford, Hampton,** Glastonbury, **Griswold,** Hartford, **Hebron, Lebanon, Litchfield,** Mansfield, Meriden, Middletown, Milford, New London, New Milford, **Pomfret, Portland,** Stratford, **Thompson, Washington, Willington,** Windham/ Willimantic, Windsor, **Woodstock**.

food&waterwatch

Protecting Connecticut from Toxic, Radioactive Fracking & Oil & Gas Extraction Wastes

- Fracking and other processes used to produce oil & gas are creating billions of gallons of liquid wastes and hundreds of thousands of tons of solid wastes annually in NY & PA.
- Huge amounts of liquid and solid wastes are coming from over 10,000 wells drilled in PA. This waste is being shipped to at least 8 states. It is estimated an additional 80,000 wells may be drilled in coming years, significantly increasing the amount of waste that will be exported from PA to other states.
- The dangers from chemical and radioactive contamination pose unacceptable risks to health and safety, municipal and private property values and natural resources, including aquifers providing well water and surface waters.
- Chemicals and naturally-occurring toxins in fracking & other extraction wastes are known to cause multiple cancers, multiple organ damage, neurological and developmental problems, birth defects, embryo toxicity and other serious health problems.
- Radium 226 is radioactive for 4,000 years and decays into lead. It is known to cause breast, bone and liver cancers, and is associated with adult and childhood leukemia.
- Radioactive and chemical contamination has spread due to accidents, spills, leaching and discharge into waterways after treatment efforts. Over 6,600 spills have been documented in just 4 states, more than half of them due to moving and transporting fracking waste.
- The CT General Assembly has failed three times in five years to ban all of these wastes. Current state law mandates that DEEP submit regulations for review between now and 7/1/18, and a temporary moratorium only bans some wastes from gas wells, leaving loopholes for other wastes to enter the state.
- Regulations in other states have not stopped accidents, spills and leaks from contaminating soil, waterways, aquifers and drinking water. Over 50% of spills occurring at waste treatment plants occur due to equipment and employee error. There are no good options for bringing this waste to Connecticut to store, treat, dispose or re-use in construction or brownfield remediation fill, or for road spreading.

Local Protection with Municipal Ordinance:

Citizen groups, town & city officials across Connecticut are passing local ordinances banning <u>all</u> oil & gas drilling, extraction and storage wastes. Connecticut municipalities have legal authority to pass these ordinances, pursuant to CT General Statute 7-148. The following municipalities have passed waste bans in this region:

- 34 CT towns & cities - Andover, Ashford, Bloomfield, Bolton, Branford, Bristol, Chaplin, Columbia, Coventry, Eastford, East Hampton, Hampton, Glastonbury, Griswold, Hartford, Hebron, Lebanon, Litchfield, Mansfield, Meriden, Middletown, Milford, New London, New Milford, Pomfret, Portland, Rocky Hill, Stratford, Thompson, Washington, Willington, Windham/Willimantic, Windsor, Woodstock.

- 400+ NY municipalities are protected from fracking wastes, due to laws passed by 15 NY county legislatures and local ordinances and regulations passed by town and city leaders.
- The State of Vermont; Pelham, MA; Dozens of municipalities and counties in New Jersey have also passed waste bans.

Parents and Grandparents: A radioactive legacy is being left for future generations where spills, accidents and discharge have occurred. Radium 226, commonly found in shale drilling waste, has a radioactive half-life of 1,600 years, takes over 4,000 years to completely decay, decays into other radioactive elements and finally, lead. Areas in other states are now permanently contaminated and being left without clean-up.

Persons on Well Water: Spills and leaks have seeped into the ground and contaminated aquifers in other states. Yale University research found trace amounts of multiple chemicals used for fracking still remaining in well water 5 years after spills and leaching occurred. The costs for repeated testing, legal action and remediation often fall on property owners using well water. Restitution costs falling on the State of CT and municipalities may be exorbitant.

Watershed: Radioactivity and chemical contamination has already occurred in other states where spills and discharge have occurred after treatment efforts. Bio-accumulation up the food chain with fishing and other recreational activities in contaminated areas may pose health problems, and future flooding may distribute contaminated sediment across large areas. Water intakes for drinking water downstream from treatment discharge may also pose problems. Small amounts of bromide can react synergistically with chlorine added to drinking water used to kill bacteria and create highly carcinogenic brominated trihalomethanes.

Farming: Where spills have occurred on farm land, nothing is growing 5-10 years later. The salt/bromide content is so high, it kills everything in the soil and it is no longer arable. Radioactivity and chemicals can be taken up by crops grown in the area, contaminating produce and animal feed, bio-accumulating up the food chain.

Regarding Re-use: The high risk of contamination makes re-use of wastes and by-products a costly endeavor if remediation is necessary. CT towns or private contractors cannot know if toxins have been removed or if radioactivity has been properly tested for if they source products mixed with fracking waste. Towns reduce risk of contamination by banning this waste and asking contractors to sign a statement that they will not procure materials derived from these wastes.

The West Virginia legislature commissioned an engineering study for re-using solid fracking wastes. The study concluded it was not advised, due to radioactivity levels, high silt content, potential future slippage and costly remediation where used for road base or construction, and high costs for treatment and transport from well sites.

Despite warnings from environmental and public health advocates about risks of contamination, the State of Pennsylvania DEP issued permits for using solid wastes in construction fill and road base material. After five years, PADEP rescinded this policy and stopped issuing permits, citing "lack of transparency".

Example of CT costs for remediation: Greenwich has spent $5.6 million for testing and partial remediation of PCB and arsenic contaminated fill brought in to build sports fields. It is estimated an additional $14 million is needed to complete the remediation.

1,000+ fracking chemicals are used nation-wide. Wastes mix with natural toxins, inc. arsenic, other heavy metals, radium, +.

Comparison of Local Ordinance Prohibitions & Current State of CT Law

Oil & Gas Drilling & Extraction Wastes	Local Bans in 33 of 34 CT Towns	Current CT Moratorium
Gas Drilling Muds	X	
Gas Drill Cuttings	X	
Gas Hydraulic Fracturing Flowback	X	X
Gas Flowback & Drill Cuttings Mix	X	X
Gas Flowback & Brine Mix	X	X
Gas Flowback & Used Frac Sand	X	X
Gas Brine Produced During Gas Flow	X	?
Gas Chemicals Used on Pad Surface	X	?
Gas Underground Storage Waste	X	
Liquified Petroleum Gas Waste	X	
Oil Drilling Muds	X	
Oil Drill Cuttings	X	
Oil Hydraulic Fracturing Flowback	X	
Oil Flowback & Drill Cuttings Mix	X	
Oil Flowback & Brine Mix	X	
Oil Flowback & Used Frac Sand	X	
Oil Brine Produced During Oil Flow	X	
Oil-Chemicals Used on Pad Surface	X	

Current CT state law is a temporary moratorium with loopholes. It mandates CTDEEP to submit regulations for review by July 1, 2018. These regulations may result in permits for storage tanks, transfer locations, treatment at HazMat facilties and discharge of partially-treated effluent. Regulations may permit re-use of wastes for construction fill or brownfield remediation. Current law leaves at CTDEEP's discretion if materials spread on roads for de-icing or dust control will be banned in future regulations. The CT General Assembly (CGA) Regulations Review Committee members do not have the authority to enact a ban. Passage of ordinances by local municipalities is needed to create comprehensive bans. 31 of 32 towns have used languge written by legal counsel for Riverkeeper (Washington, CT is modeled after CT law).

The current temporary moratorium has loopholes. It mentions several types of wastes, but only wastes that come directly from or secondarily to the hydraulic fracturing process (the pumping of a chemical solution to create fractures in rock). This leaves out huge amounts of wastes that are created during other processes of gas & oil extraction, such as the drilling, production, well maintenance and some gas storage processes. This includes huge amounts of solid and liquid wastes that are currently exported to numerous states from Pennsylvania.

In 2017, a bill passed the CT General Assembly House, but did not get called by the Senate. This bill had the same weak language and loopholes in the current moratorium. If passed by the CGA, it would have rolled back key protections in current state law, removing: 1. All toxins in the waste must be reported when brought into the state. 2. DEEP must ensure the public & environs is protected from radioactivity. 3. Only waste brought in for research would be deemed as hazardous, creating a new loophole for waste transported through the state to not be deemed as hazardous waste. 4. Wastes must be tracked from place of origen, through transfer locations to final disposal.

Understanding Public Act 14-200 Language in Detail

This law's language prohibits hydraulic fracturing waste, and other substances used for or generated secondarily to the purpose of hydraulic fracturing...which is the process of pumping a fluid to fracture rock. This is defined in Section 1(a)(4) and Section 1(a)(10).

The specific wording "generated secondarily to the purpose of hydraulic fracturing" does not mean all wastes associated with drilling and extraction. Numerous types of wastes are mentioned in Section 1(a)(10), but what is missing are the additional processes that also produce these wastes during the entire extraction lifecycle. This includes:

1. the drilling process which produces drill cuttings and drilling muds.
2. the production process which produces brine/produced water.
3. the storage process of gas & LPG which includes "fallout" brine.

Also, not included are wastes from oil wells, as Sec 1(a)(4) only refers to the hydraulic fracturing process used for gas.

Section 1(a)(10)(b) also mandates future regulations and designates the moratorium as temporary..."such wastes shall be subject to the state's hazardous waste management regulations"...and the commissioner "shall submit regulations to (the CGA Regulations Review Committee) not later than July 1, 2018."

The moratorium will end when the RRC finishes its review and regulations are adopted. There may be subsequent draft changes after the initial submission, but the RRC does not have the authority to enact a ban. Also, if discussion of regulations is part of a meeting agenda, and that meeting fails to have the required quorum, then regulations automatically pass.

Misunderstanding has occurred, in part, as persons refer only to the summaries put out by the Office of Legislative Research. The OLR summaries have had a major error and are misleading:

1. 2014 error - stated when developing regulations, DEEP can ban fracking waste. This is incorrect. DEEP is required by Section 1(a)(10)(b) to submit regulations that will allow HazMat facilities to apply for permits to process. The 2014 summary confuses language in Section 1(a)(10)(d) which gives DEEP discretion to ban only products used for "anti-icing, de-icing, pre-wetting or dust suppression" or DEEP can allow these products under conditions that the Commissioner deems necessary to protecting health & environment. Note: The Department of Public Health is not consulted, nor are Comprehensive Health Assessments required.
2. 2014, 2015 & 2017 OLR summaries initially mention hydraulic fracturing waste, then continuously refer to fracking waste. The additional drilling and extraction processes that also produce wastes, but are not defined in PA14-200, are not explained. Readers unfamiliar with extraction processes are left unaware that loopholes exist.

For more information, community educational events or short presentations for elected and appointed officials, please contact: Jennifer Siskind, Local Coordinator, Food & Water Watch, jsiskind@fwwlocal.org

Office of Legislative Research
Research Report
July 17, 2015
2015-R-0178

CONNECTICUT'S FRACKING WASTE MORATORIUM

By: Janet Kaminski Leduc, Senior Legislative Attorney

FRACKING

Fracking, also known as hydraulic fracturing, is the process of pumping fluid into or under the surface of the ground to create fractures in rock for exploration, development, production, or recovery of natural gas. It does not include the drilling or repair of a geothermal water well or any other well drilled or repaired for drinking water purposes (CGS § 22a-472).

ISSUE

Describe Connecticut's fracking waste moratorium and related requirements of Public Act (PA) 14-200.

SUMMARY

PA 14-200, which took effect July 1, 2014, established a moratorium on certain activities associated with fracking waste in Connecticut (CGS § 22a-472(a)-(g)).

The moratorium lasts until the Department of Energy and Environmental Protection (DEEP) adopts regulations to, among other things, control fracking waste as a hazardous waste. DEEP may, under certain conditions, choose not to adopt the regulations, in which case the moratorium would remain in force.

Under the act, the moratorium applies to any person accepting, receiving, collecting, storing, treating, disposing of, or transferring between vehicles or modes of transportation any fracking waste. The wastes covered by the act include wastewater, wastewater solids, brine, sludge, drill cuttings, or any other substance used or generated in the process of fracking.

The act requires DEEP to submit regulations to the legislature's Regulations Review Committee between July 1, 2017 and July 1, 2018. It also (1) requires DEEP to collect fracking waste product information, (2) requires anyone transporting fracking waste in Connecticut after the regulations are adopted to obtain a DEEP permit, and (3) exempts certain research on small amounts of fracking waste from the moratorium.

ESTABLISHING REGULATIONS

PA 14-200 requires DEEP to submit regulations to the Regulations Review Committee for approval after June 30, 2017 and no later than July 1, 2018. The DEEP commissioner has discretion to not adopt regulations under certain conditions (see below).

Until regulations are approved, activities involving fracking waste, as well as products derived from or containing any of these wastes, are prohibited in Connecticut.

The regulations must:

1. subject fracking waste to the state's hazardous waste management regulations;

2. ensure that radioactive components of fracking waste do not pollute the air, land, or waters or otherwise threaten human health or the environment; and

3. require disclosure of the waste's composition.

Additionally, the act prohibits the sale, manufacture, distribution, or use of de-icing and dust suppression products derived from or containing fracking waste until DEEP adopts regulations controlling these products.

COLLECTING INFORMATION ON FRACKING WASTE PRODUCTS

The act requires the DEEP commissioner to request, at a minimum, the following information about fracking waste products, presumably from people or firms involved in the industry:

1. the extent to which anti-icing, de-icing, pre-wetting, or dust suppression products are or could be derived from or contain fracking waste;

2. the origin of the materials used for the products; and

3. the products' or fracking wastes' chemical composition.

Any information the commissioner acquires is subject to disclosure under the Freedom of Information Act.

DISCRETION TO ADOPT REGULATIONS

PA 14-200 authorizes the DEEP commissioner to ban a particular product or not adopt regulations if a person fails to provide information requested under the act.

The option to not adopt regulations applies to both the fracking waste and the de-icing and dust suppression product regulations.

PERMITS

After regulations are adopted, the act requires any person collecting or transporting fracking waste for receipt, acceptance, or transfer in Connecticut to obtain a DEEP permit before bringing the material into the state. This requirement applies even if the person is not in the waste management business. The permit must require records to be kept of the wastes' origin and all intermediate and final delivery points.

RESEARCH EXEMPTION

The act exempts certain research activities from the moratorium. Before adopting regulations, DEEP may grant up to three requests to allow a person to treat no more than a total of 330 gallons of fracking waste. DEEP may permit a single treatment in excess of this if the approval is issued to a single person and does not exceed 500 gallons.

The research must be for determining whether fracking waste can be made suitable for use or reuse. Applicants must be professionally qualified to treat the waste. DEEP's approval must include conditions designed to prevent pollution or protect human health and the environment. All waste treated under this exemption must be handled as hazardous waste in accordance with applicable state law, which provides standards and requirements for treatment, storage, and disposal.

JKL:bs

food&water watch

WATER

WASTE: The Soft & Dirty Underbelly of Fracking

Fact Sheet • April 2012

Drilling and fracking a single shale well can produce millions of gallons of toxic wastewater and hundreds of tons of potentially radioactive solid waste. Disposal of these wastes poses serious environmental and public health risks.

The Fracking Nightmare

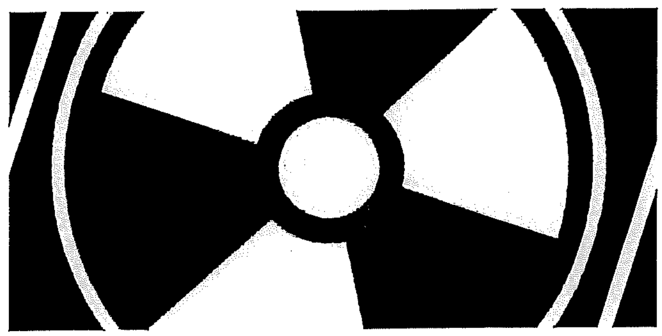
New drilling and fracking technologies have made it feasible to extract large amounts of oil and gas from shale and similar underground rock formations.[1] While this shale development has been a boon for the oil and gas industry, it has been a nightmare for communities living with the water pollution, air pollution, explosions and fires, and ruined landscapes. Fracking for oil and gas also contributes to climate-threatening levels of greenhouse gas emissions.

Rivers of Toxic Wastewater

To frack a shale gas well, millions of gallons of fracking fluid — a blend of water, sand and chemicals — are pumped underground at high pressure to break up shale rock, allowing gas to flow into the well.[2] The technology for shale oil development is essentially the same.[3] Some of the fracking fluid stays underground indefinitely and the rest flows back up out of the well, mixed with naturally contaminated waters from deep below ground.[4]

Fracking wastewater contains numerous chemical additives, many of which are far from safe:

- Known and suspected carcinogens that have been present in fracking fluids include naphthalene, benzene and acrylamide.[5] Other environmental toxins present in some fracking fluids, such as toluene, ethylbenzene and xylenes, can result in nervous system, kidney and/or liver problems.[6]
- Since fracking fluid recipes are proprietary, and since there is no federal requirement for disclosure, fracking fluid can contain unknown chemical additives.[7] This means the full threat of fracking wastewater is also unknown.



Fracking wastewater contains potentially extreme levels of often naturally occurring but harmful contaminants that are brought to the surface:

- Harmful contaminants can include arsenic, lead, hexavalent chromium, barium, strontium, benzene, polycyclic aromatic hydrocarbons, toluene, xylene, corrosive salts and naturally occurring radioactive material, such as radium-226.[8]

The *New York Times* reviewed documents on gas wells in Pennsylvania and West Virginia and found that at least 116 wells produced wastewater with radiation levels that were a hundred times the U.S. EPA's drinking water standard; at least 15 of these wells had wastewater at more than a thousand times the standard.[9]

Since conventional treatment facilities are not equipped to treat radioactive material and other contaminants in fracking wastewater, many of these contaminants simply flow through conventional treatment facilities and get discharged into public rivers and streams.[10] This could contaminate drinking water supplies for downstream communities and could harm aquatic life essential to sustaining recreational and commercial fisheries.

Researchers at the University of Pittsburgh tested water being discharged, after treatment, into a creek from a facility in Pennsylvania and found average concentrations of benzene at twice the U.S. EPA's drinking water standard, barium at 14 times the standard, total dissolved solids at 373 times the standard, strontium at 746 times the EPA's recommended level for drinking water and bromide at 2,138 times the level that triggers regulatory reporting requirements under the treatment plant's permit in Pennsylvania.[11]

Bromides cause particular problems for downstream drinking water utilities. Bromides can react during water treatment to form brominated trihalomethanes, which are linked to cancer and birth defects and which are difficult to remove once they've been added to drinking water supplies.[12]

Mountains of Toxic Waste

New York estimated that drilling a typical shale gas well would generate about 5,859 cubic feet of rock cuttings — enough to cover an acre of land more than 1.5 inches deep.[13] These cuttings, about the size of coarse grains of sand, are coated with used drilling fluids that can contain contaminants such as benzene, cadmium, arsenic, mercury and radium-226.[14]

Dumping this toxic waste in landfills could expose workers to harmful levels of some of these environmental toxins.[15] Radium-226 contamination would persist for more than a thousand years after the landfill closed, ruining the productivity of the land for many generations.[16]

Dumping loads of drilling cuttings in landfills could lead to operational problems as well. The landfill linings could be degraded, resulting in leaks of radioactive material and other harmful contaminants.[17] Also, layers of drilling cutting wastes could plug up the flow of landfill fluids, causing spills out the sides of the landfill.[18]

Take Action

Fracking wastes are clearly hazardous, yet they are not regulated as hazardous waste under federal law.[19] Disposing of these wastes by injecting them deep below ground is believed to have caused numerous earthquakes, and such disposal can also mean the wastes are hauled long distances over public roads, risking accidents and spills.[20] If the oil and gas industry succeeds in bringing drilling and fracking to new areas of the country, the problems with disposing of these wastes will only grow.

To find out how you can help the nationwide effort to ban fracking, visit:

www.foodandwaterwatch.org

Endnotes

1 National Petroleum Council. "Prudent Development: Realizing the Potential of North America's Abundant Natural Gas and Oil Resources." September 2011 at 192 and 193.

2 United States Environmental Protection Agency. "Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources." (EPA/600/R-11/122). November 2011 at 15 and 22.

3 National Petroleum Council. September 2011 at 192.

4 United States Environmental Protection Agency. November 2011 at 15 and 23, 42 and 43.

5 United States House of Representatives. Committee on Energy and Commerce. [Minority Staff Report]. "Chemicals used in hydraulic fracturing." April 2011 at 9.

6 *Ibid.* at 10.

7 *Ibid.* at 4.

8 Urbina, Ian. "Regulation lax as gas wells' tainted water hits rivers." *The New York Times*. February 26, 2011; 76 U.S. Fed. Reg. 66286, 66296 (October 26, 2011); Mall, Amy and Dianne Donnelly. Natural Resources Defense Council. "Petition for Rulemaking Pursuant to Section 6974(a) of the Resource Conservation and Recovery Act." September 8, 2010 at 8 to 9.

9 Urbina (February 26, 2011).

10 Urbina (February 26, 2011); 76 U.S. Fed. Reg. 66286, 66296 (October 26, 2011).

11 Volz, Conrad Daniel. Center for Healthy Environments and Communities, University of Pittsburgh Graduate School of Public Health. Testimony on Natural Gas Drilling, Public Health and Environmental Impacts. Subcommittee on Water and Wildlife. Committee on Environment and Public Works. United States Senate. April 12, 2011 at 4 to 6.

12 Hopey, Don. "Bromide: a concern in drilling wastewater." *Pittsburgh Post-Gazette*. March 13, 2011.

13 New York State Department of Environmental Conservation. "Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program: Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs." September 7, 2011 at 5-34.

14 Resnikoff, Marvin et al. Radioactive Waste Management Associates. [Report prepared for Residents for the Preservation of Lowman and Chemung]. "Radioactivity in Marcellus Shale." May 19, 2010 at 7; Mall and Donnelly. September 8, 2010 at 10.

15 Resnikoff et al. May 19, 2010 at 7 to 8.

16 *Ibid.* at 7 to 8.

17 *Ibid.* at 8; North Carolina Departments of Environment and Natural Resources, Commerce, and Justice and RAFI-USA. [Draft]. "North Carolina Oil and Gas Study under Session Law 2011-276." March 2012 at 190.

18 North Carolina Departments of Environment and Natural Resources, Commerce, and Justice and RAFI-USA. [March 2012 at 189 to 190.

19 Mall and Donnelly. September 8, 2010 at 7, 37 to 41.

20 Soraghan, Mike. "Wastewater injection well sparked earthquake – Ohio officials." *E&E Publishing, LLC*. March 9, 2012; Niquette, Mark. "Ohio tries to escape fate as a dumping ground for fracking fluid." *Bloomberg*. February 1, 2012.

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Fracking is a nickname for "hydraulic fracturing". It means pumping a highly toxic chemical and sand solution into the ground, at very high pressure, to shatter or fracture shale. This releases trapped oil & gas from the layers of rock. Traditionally, this occurred by drilling straight down vertically. But new technology allows:

- Wells to be dug up to 2 miles deep
- Continue the drilling sideways for up to 2 miles horizontally.
- These are called unconventional wells, or high volume, horizontally fractured wells.

"High volume" because, on average, each well is:

- Pumped with 4 to 5 Million gallons of toxic solution made of water, chemicals and sand, and
- Large quantities return to the surface and need to be disposed of as waste.
- Each well can produce more than a million gallons of liquid waste and
- Thousands of tons of solid waste in the form of sand, earth & rock drilled out of ground and sludge.

Closest to Connecticut, in Pennsylvania:

- More than 9,775 of these wells have been drilled already and
- There are estimates that more than 80,000 wells could be drilled in future years.

According to Pennsylvania Department of Environmental Protection records compiled by FracTracker Alliance, from January to June 2015, Pennsylvania produced over 878.8 Million gallons of liquid waste and over 647,000 tons of solid waste in just 6 mos. There is so much waste to be disposed of that PA is shipping it out to 8 different states. This waste is highly toxic. Toxic chemical solutions are used for:

- Both the drilling process and the fracturing process
- To remove sediments and wastes from equipment
- To remove scale that builds up inside pipes.

More than 1,000 chemicals are voluntarily reported by the industry. The total number of chemicals used are unknown because the oil & gas industry is allowed to withhold reporting chemicals considered proprietary, or trade secrets.

The fractured shale also releases a salty brine that is:

- Remnant from ancient seas that existed 350 million years ago. These corrosive salts are 8x saltier than sea water of today.
- The brine can also be contaminated with naturally occurring but still highly toxic material buried deep in the earth, including:
  - Radioactive material, arsenic, lead, strontium, benzene, toluene, xylene, hexavalent chromium.
  - Most people had never heard of hexavalent chromium before the movie, Erin Brokovich.

These natural toxins mix with the solution injected into the ground and wastes coming out of the well, so what solution goes IN can come OUT even more contaminated than it was to start. Solid wastes are also contaminated by drilling and fracturing chemicals and naturally-occurring toxins buried in the ground.

Regarding the radioactive material:

- The EPA safe level of radium in drinking water is 5 picocuries per liter
- Brine coming out of wells has measured as high as 26,000 picocuries per liter.
- A picocurie is a measurement named after Madame Curie who discovered radium and later died from radium poisoning.
- Radium 226 has a radioactive half-life of 1,600 years. As it decays, it turns into other hazardous material such as radioactive polonium and lead. Total radioactive decay time can exceed 4,000 years.

When radium is released into the environment:

- It can build up in soil & waterway sediment.
- Low levels can accumulate where there is repeated discharge and become a bigger problem over time.
- It can be absorbed by plant material and crops, by fish and animals who eat the plants or water, going all the way up to humans at the top of the food chain.
- It can be inhaled from dust where there is contaminated soil
- Absorbed through an open wound in the skin when swimming or wading.
- Once inside the body, radium can settle in high calcium areas, which is why it is KNOWN to cause breast, bone and liver cancer. It also causes aplastic anemia.
- Radium is also associated with adult and childhood leukemia.

More than 750 studies have been published to date showing the harms of fracking. The attached infographic shows research by Dr. Theo Colborne and the effects of 353 chemicals used for fracking on the human body:

- Multiple organ damage
- Neurological damage
- Cancers
- Birth defects, sterility and other reproductive and developmental disorders.

(See Infographic: Body Systems Affected by Fracking Chemicals by Physicians for Social Responsibility)

This waste is being moved around by thousands of tanker trucks and dump trucks. Sometimes the waste is turned into a secondary product.

- When waste is disposed this way, it's given a "Beneficial Use Determination" or B-U-D or BUD permit.
- Spreading brine on roads as de-icer and for dust control are examples.
- Solid waste is being marketed for construction projects, as base material for roads and mixed into capping material when brownfields are remediated.

Using this material may result in the procurement of an inferior product and risks contamination and other remediation costs.

The West Virginia legislature commissioned a study from research and engineering staff at Marshall University to determine if the vast amounts of fracking waste produced in West Virginia could be re-used for road building and brownfields. Their research determined that the wastes aren't suitable because of:

- High moisture content
- Silt content
- Chloride and radiation contamination exceeding allowable limits.
- Processing and shipping waste from drilling sites would be more expensive than using other more appropriate materials
- There would be risks of settling in the future.

There is a long list as to why ban this waste locally:

- The handling & disposal of this waste is causing severe contamination wherever accidents, spills and leaks are occurring.
- There is risk for contaminated run-off or leaching wherever wastes and by-products are used or spilled.
- Spills are affecting private & public property, roadways and waterways.
- Spills have seeped into the ground, spoiling aquifers and wells used for drinking water.
- Local police and fire departments have the burden of being first responders to spills.
- And people working, living or driving nearby can be exposed to toxic plumes while waiting for clean-up.
- Salts and other toxins can make farmland infertile, and crops can absorb toxins, including radioactivity.
- Livestock, pets, wild game and animals have become sickened and died after exposure, and can be attracted to the waste like a salt-lick.
- Radioactivity can remain in water and contaminated sediment and soils for thousands of years.
- Remediation is extremely expensive, if it can even be done at all, and the cost falls on local taxpayers. As example, the Town of Greenwich recently spent millions of dollars digging up and replacing their school sports fields, when it was discovered that fill used to build the fields was contaminated with PCBs from coal ash waste. The expense of remediating potentially contaminated areas in the future can be prevented by banning fracking and other oil & gas extraction wastes.
- Property values have significantly depreciated, and property and farmland has been rendered unusable, where spills and contamination have occurred.

The State of Vermont has already passed a fracking waste ban.

The NJ legislature passed a waste ban twice, but each time Governor Christie vetoed it. In response, dozens of towns and counties in New Jersey have passed local bans.

New York has banned high volume fracturing, but the state allows waste to be imported from PA. Scores of NY towns and 15 NY counties have now passed fracking waste bans, protecting hundreds of NY municipalities. The New York City Council also passed a waste ban for all 5 boroughs in August 2016.

In CT, legislators attempted to pass a state-wide ban 2 years ago.

- Unfortunately, the bill was compromised and a temporary moratorium became law instead.
- The changes also mandate that the CT Department of Energy and Environmental Protection (DEEP) submit regulations for review between July 2017 and July 2018, or as soon as next summer.
- We don't know what these regulations will be yet, but so far, Commissioner Klee has NOT supported a ban. He testified against a ban when legislation was still in committee, stating he didn't want to interfere with commerce.
- He and his staff have since made several public statements that CT regulations could be modeled after other states' or federal guidelines, and mention "cradle-to-grave" tracking, which is unattainable.

Why regulations by CTDEEP will likely fail:

- DEEP has had huge budget and staffing cuts and can't reasonably be expected to enforce regulations.
- DEEP does not have any oversight or jurisdiction over how this waste is handled before it enters CT, so any attempts to track or manifest materials will likely not be accurate.
- There is no cataloging of waste as it is produced by each well, and each well can vary in the type of contaminants it produces. Different chemicals are used to handle specific geological issues at separate wells, and naturally-occurring toxins buried in the ground can vary at each location.
- Inspectors are not monitoring, supervising or cataloging waste as it is produced. This waste is partially treated and re-used numerous times at different wells before disposal, with additional chemicals used and in-ground toxins causing varying levels and types of contamination.
- "Best Management Practices" may not require high-cost and time-consuming testing methods. The gold-standard to accurately test for radium content requires a 30 day hold in a sealed container prior to using gamma ray spectroscopy. Representative sampling or testing a small percentage of material, instead of every load, will also be an ineffective method of monitoring contaminants.
- Regulations on paper cannot stop accidents, leaks, spills, equipment and human errors or illegal activity from occurring in the real-time handling of this waste.

The current CT temporary moratorium makes CT the only state in the nation that labels fracking waste as hazardous material. This is a double-edged sword because:

- It does require stronger rules for disposal and labeling of tankers transporting waste through CT.
- But if regulations are approved, 3 privately-owned, for-profit hazardous waste treatment facilities, located in Bristol, Meriden and Bridgeport, may apply for permits.
- I-84 and other CT roadways will be driven by thousands of tanker trucks making delivery. Highly concentrated toxic residuals from treated waste will also be shipped out of the state after treatment.
- It is extremely difficult and expensive to remove all toxins. Partially treated but still contaminated effluent may be discharged or passed to other municipal treatment facilities. These public facilities will not be equipped to remove toxins or radioactivity, and may potentially discharge contaminated

effluent into local water ways. Salts and chemicals may damage treatment facilities, and radioactive sludge may require costly alternative disposal methods, increasing taxpayer burdens.

These hazardous waste facilities have been non-compliant in treating the wastes products these facilities are already permitted to receive. According to EPA records posted on Rivers Alliance website, from 2013 to 2016, all 3 have been:

- Repeatedly non-compliant & in violation
- Exceeding allowable discharges for 9 to 12 of past 12 quarters
- Meaning most or all of the past 3 years.

http://www.riversalliance.org/CToxicsTreatment/overview.cfm

How would waste be brought to individual towns?

Specifics are unknown as regulations haven't been released, but some possible scenarios are:

- Private contractors or towns might apply for BUD permits to use waste in construction projects.
- Waste might also be transported through towns to treatment facilities.
- Land could be leased for storage tanks to hold wastes or partially treated effluents, with tanker trucks transferring liquids in and out.
    - Problems have occurred with storage containers leaking
    - Escape hatches and valves may vent noxious fumes
    - Valves have also failed or been left open accidentally by employees causing huge spills in PA.
    - The transfer of waste by hose into and out of storage containers contributes to spills.

Why take action with a local ordinance?

To eliminate the risk of spills, leaks, run-off, leaching or airborne toxins contaminating air and waterways, properties and drinking water, farm land and impacting public health.

CT Statue 7-148(h) states towns have the authority to "prohibit the carrying on within the municipality of any trade, manufacture, business or profession which is, or may be...prejudicial to public health."

6 CT towns, including Washington, Coventry, Mansfield, Portland, Andover and Windham/City of Willimantic have passed local ordinances banning fracking and oil & gas drilling and extraction wastes.

What does an ordinance prohibit?

The language is specific to wastes from oil & gas drilling and extraction activity.

(It does not ban refined oil & gas waste or refined oil & gas products. As example, motor oil waste or other engine lubricants can still be disposed. Also, drinking water wells that need to be "fracked" would still be allowed. While it is the same name and high pressure process, drinking water wells only use clean water, not the chemical solutions used for oil & gas drilling.)

No waste may be applied or placed on any property or roads. It may not be processed, treated, sold or acquired, disposed of, stored in, handled or transferred in town. Handling and transfer has caused spills to occur in other states.

It is not possible to ban the transportation of fracking waste through towns. Federal Interstate Commerce laws do not allow banning transportation. This is unfortunate as the thousands of tanker trucks and dump trucks carrying waste in other states have increased road accidents, contributing to spills and contamination.

The ordinance would however make it illegal for tanker trucks to have leaking valves if they pass through town. This has been a problem in other states where waste is transported, leaking toxic solution onto the roadway. Friction from tire traffic can cause chemicals and radioactive materials to become airborne and be inhaled.

Local ordinances provide legal parameters for towns to recoup damages if needed.

FIDUCIARY RESPONSIBILITY
MEMORANDUM OF LAW

MEMORANDUM TO FILE

Date: February 15, 2018
From: Brian Candela
RE: Fiduciary Responsibility (401a & 457 Plans)

This memorandum of law provides a summary of the scope and responsibilities of the board concerning the following plans: Defined Contribution 401(a) and Deferred Compensation 457.

A. General Background, Roles and Responsibilities of Fiduciaries:

Almost all states and municipalities have adopted the bedrock fiduciary standards of personal liability for the benefit of plan participants (employees). Although municipal and governmental benefit plans are not regulated by the Employment Retirement Income Security Act of 1974 (ERISA), the law acts as a benchmark for local government plan sponsors and plan administrators.[1] Since ERISA and state law protections stem from common law fiduciary and trust principles, many public pension protections are similar to those found in ERISA. In fact, the standards by which municipal governments are regulated, such as state law, are almost always derived and/or adapted from those set forth in ERISA.[2] Under ERISA and most state pension laws, fiduciary status is based on the functions performed for the plan, not by designation or title.[3] According to the IRS, a plan fiduciary is anyone who: (1) exercises discretionary authority or discretionary control over management or administration of the plan, (2) exercises any authority or control over management or disposition of plan assets, and/or (3) gives investment advice for a fee or other compensation with respect to assets of the plan. Plan administrators, trustees and investment managers are almost always considered fiduciaries under ERISA. The key to determining fiduciary status is whether an individual is exercising discretion or control over the plan or its assets. ERISA defines fiduciary as one with discretionary authority or control over pension plan assets, or one who manages pension assets.[4] Duties and responsibilities of fiduciaries may be imposed by state law, local ordinance and the applicable plan documents.

Fiduciaries have critical responsibilities in protecting the plan and its participants and are subject to the highest standards of care known under the law. A fiduciary must discharge his duties solely in the interest of the participants (29 U.S.C. § 1104(a)(1)(A), also known as the Exclusive Benefit Rule) and shall also act with care, skill, prudence and diligence similar to a prudent person who is familiar with such matters (29 U.S.C. § 1104(a)(1)(B), also known as the Prudent Man Rule).[5] A fiduciary must also follow the plan's documents/terms (29 U.S.C. § 1104(a)(1)(D)), diversify the plan investments (29 U.S.C. § 1104(a)(1)(C)), pay only reasonable plan expenses and undertake an appropriate analysis of a proposed course of action. It is recommended that the board should adopt both a strong conflicts of interest policy and an investment policy statement that clearly defines how a fiduciary will invest the retirement funds and the measures to be utilized to ensure consistent and competitive performance of the investment vehicles/managers of the funds.

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[1] ERISA was enacted to provide a thorough definition of fiduciary responsibility. According to the U.S. Department of Labor, ERISA requires plans to regularly provide participants with information about the plan including information about plan features and funding. ERISA also sets minimum standards for participation, vesting, benefit accrual and funding; and requires accountability of plan fiduciaries. Finally, ERISA gives participants the right to sue for benefits and breaches of fiduciary duty. Under ERISA, plan trustees, plan administrators and members of a plan's investment committee are all plan fiduciaries.
[2] Where state law is not well developed, guidance and best practices should be drawn from ERISA.
[3] 29 U.S.C. section 1104(a)(1)B) requires a fiduciary to discharge his duties "with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."
[4] IRC § 4975(e)(3); 29 U.S.C. § 1002(21).
[5] If a fiduciary lacks the expertise to perform one of his functions, he must hire someone with professional knowledge to carry out investments and other functions.

B. Applicable sections from the Connecticut General Statutes:

By statute, Connecticut municipalities must also comply with the prudent investor standards for investing and managing pension trusts.[6] Connecticut General Statutes § 7-450(a) allows any municipality to establish a pension or other post-employment health and life benefit system. Connecticut General Statutes § 7-450(b) mandates that the "funds held in any such trust may be invested in accordance with the terms of the pension, retirement or other postemployment health and life benefit plan, as such terms may be amended from time to time. The investment and management of the assets of any such trust shall be in compliance with the prudent investor rule as set forth in sections 45a-541 - 45a-541l, inclusive."

Connecticut General Statutes § 45a-451 is entitled the Connecticut Uniform Prudent Investor Act and includes §§ 45a-541 – 45a-451l.[7] These statutes mirror the ERISA requirements. It is a default rule that may be expanded, restricted, eliminated or otherwise altered by provisions of the trust.[8] It is important to note, however, that trust language cannot eliminate the trustee's duty to act in good faith and in a manner consistent with the terms and purposes of the discretionary power. A trustee who invests and manages trust assets owes a duty to the beneficiaries of the trust to comply with the prudent investor rule.[9] A trustee is not liable to a beneficiary to the extent that the trustee acted in a reasonable reliance on the provisions of the trust.[10] A trustee shall invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust.[11] Connecticut General Statutes § 45a-451b(c) provides ten criteria that a trustee shall consider in investing and managing trust assets.[12] A trustee shall take reasonable steps to verify facts relevant to the investment and management of trust assets.[13] A trustee shall diversify the investments of the trust.[14] Within a reasonable time after accepting a trusteeship or receiving trust assets, the trustee shall review the trust assets and implement decisions concerning those assets in order to bring the trust portfolio into compliance with requirements of the trust.[15] A trustee shall invest and manage the trust assets solely in the interest of the beneficiaries.[16] If the trust has two or more beneficiaries, the trustee shall act impartially in investing and managing the trust assets.[17] A trustee may only incur costs that are appropriate and reasonable in relation to the assets, the purposes of the trust and the skill of the trustee.[18] The prudent investor rule expresses a standard of conduct and not outcome.[19] A trustee may delegate investment and management functions that a prudent trustee of comparable skills could properly delegate.[20] The trustee shall exercise

[6] Connecticut General Statutes § 7-450.
[7] Connecticut General Statutes § 45a-541 - 45a-541l. Some version of the Uniform Prudent Investor Act of 1994 has been enacted in a majority of U.S. states. "Generally, a trustee must act with the care of a prudent investor." United States Trust Company v. Bohart, 197 Conn. 34, 48 (1985).
[8] Connecticut General Statutes § 45a-451a(b)
[9] Connecticut General Statutes § 45a-451a(a).
[10] Connecticut General Statutes § 45a-451a(b).
[11] Connecticut General Statutes § 45a-451b(a).
[12] Among the circumstances that a trustee shall consider in investing and managing trust assets are as follows: (1) general economic conditions; (2) possible effect of inflation/deflation; (3) tax consequences of investments, strategies and distributions; (4) role of each investment in the trust portfolio; (5) expected total return from income and appreciation of capital; (6) related trusts and other income of beneficiaries; (7) needs for liquidity; (8) an assets special relationship to the purpose of the trust; (9) size of the portfolio; and (10) nature and estimated duration of trust.
[13] Connecticut General Statutes § 45a-451b(d).
[14] Connecticut General Statutes § 45a-451c.
[15] Connecticut General Statutes § 45a-451d.
[16] Connecticut General Statutes § 45a-451e.
[17] Connecticut General Statutes § 45a-451f.
[18] Connecticut General Statutes § 45a-451g.
[19] Connecticut General Statutes § 45a-451h.
[20] Connecticut General Statutes § 45a-451i(a). To delegate, the trustee must exercise reasonable care, skill and caution in: (1) selecting the investment professional; (2) establishing the scope and terms of the delegation, consistent with the purposes and terms of

reasonable care, skill and caution in selecting an agent, establish the scope/terms of the delegation and periodically reviewing the agent's actions.[21] In performing the delegated function, an agent owed a duty to the trustee and the trust to exercise reasonable care to comply with the scope and terms of the delegation.[22] A trustee who complies with the requirements of Connecticut General Statutes § 45a-451i(a) is not liable to the beneficiaries or to the trust for the decisions or actions of the agent to whom the function was delegated.[23] However, a trustee who breaches their duty to comply with the Connecticut Uniform Prudent Investor Act will be liable for any violations.

I am enclosing for your review several draft documents which pertain to possible revisions to the City ordinances. Subsequent to your review and approval, I will forward these draft documents to the Ordinance Committee for their review. The documents are as follows (1-3): For your ready reference, I have also enclosed documents which you may find helpful in your review process. These documents are as follows:

1) Proposed revisions to the Municipal Liability Ordinance (Chapter 67A) to include defense and indemnity for public members of the Pension, OPEB, 401(a) and 457 boards.

2) Proposed new ordinance as it pertains to the 401(a) Defined Contribution Plan. Enclosed also please find revisions to the 401(a) plan documents.

3) Proposed new ordinance as it pertains to the 457 Deferred Compensation Plan. Enclosed also please find revisions to the 457 plan documents.

For your ready reference, I have also enclosed documents which you may find helpful in your review process. These documents are as follows:

a) Red-line draft of the 401(a) Defined Contribution Plan ordinance.

b) Red-line draft of the 457 Deferred Compensation Plan ordinance.

c) Bate Stamp (B27-B29): A copy of the Prudent Investor Rules (Connecticut General Statutes §§ 45a-541 through 45a-541l).

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the trust; and (3) periodically review the investment professional's actions in order to monitor the agent's performance and compliance with the scope and terms of the delegation. Connecticut General Statutes § 45a-451i(a) & Connecticut General Statutes § 45a-451i(c).

[21] Connecticut General Statutes § 45a-451i(a).

[22] Connecticut General Statutes § 45a-451i(b).

[23] Connecticut General Statutes § 45a-451i(c).

Exhibit B

Connecticut General Statutes Sections 45a-541 to 45a-541l, inclusive (as in effective July 1, 2007)

Connecticut Uniform Prudent Investor Act

Sec. 45a-541. Short title: Connecticut Uniform Prudent Investor Act. Sections 45a-541 to 45a-541*l*, inclusive, may be cited as the "Connecticut Uniform Prudent Investor Act".

Sec. 45a-541a. Prudent investor rule. (a) Except as provided in subsection (b) of this section, a trustee who invests and manages trust assets owes a duty to the beneficiaries of the trust to comply with the prudent investor rule, as set forth in sections 45a-541 to 45a-541*l*, inclusive.

(b) The prudent investor rule is a default rule that may be expanded, restricted, eliminated or otherwise altered by provisions of the trust. A trustee is not liable to a beneficiary to the extent that the trustee acted in reasonable reliance on provisions of the trust.

Sec. 45a-541b. Standard of care. Portfolio strategy. Risk and return objectives. (a) A trustee shall invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill and caution.

(b) A trustee's investment and management decisions respecting individual assets shall be evaluated not in isolation, but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust.

(c) Among circumstances that a trustee shall consider in investing and managing trust assets are such of the following as are relevant to the trust or its beneficiaries: (1) General economic conditions; (2) the possible effect of inflation or deflation; (3) the expected tax consequences of investment decisions, strategies and distributions; (4) the role that each investment or course of action plays within the overall trust portfolio, which may include financial assets, interests in closely held enterprises, tangible and intangible personal property and real property; (5) the expected total return from income and the appreciation of capital; (6) related trusts and other income and resources of the beneficiaries; (7) needs for liquidity, for regularity of income and for preservation or appreciation of capital; (8) an asset's special relationship or special value, if any, to the purposes of the trust or to one or more of the beneficiaries; (9) the size of the portfolio; and (10) the nature and estimated duration of the trust.

(d) A trustee shall take reasonable steps to verify facts relevant to the investment and management of trust assets.

(e) Subject to the standard of sections 45a-541 to 45a-541*l*, inclusive, a trustee may invest in any kind of property or type of investment.

(f) A trustee who has special skills or expertise, or is named trustee in reliance upon the trustee's representation that the trustee has special skills or expertise, has a duty to use those special skills or expertise.

Sec. 45a-541c. Diversification. A trustee shall diversify the investments of the trust unless the trustee reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying.

Sec. 45a-541d. Duties at inception of trusteeship. Within a reasonable time after accepting a trusteeship or receiving trust assets, a trustee shall review the trust assets and make and implement decisions concerning the retention and disposition of assets, in order to bring the trust portfolio into compliance with the purposes, terms, distribution requirements and other circumstances of the trust, and with the requirements of sections 45a-541 to 45a-541*l*, inclusive.

Sec. 45a-541e. Loyalty. A trustee shall invest and manage the trust assets solely in the interest of the beneficiaries.

Sec. 45a-541f. Impartiality. If a trust has two or more beneficiaries, the trustee shall act impartially in investing and managing the trust assets, taking into account any differing interests of the beneficiaries.

Sec. 45a-541g. Investment costs. In investing and managing trust assets, a trustee may only incur costs that are appropriate and reasonable in relation to the assets, the purposes of the trust and the skills of the trustee.

Sec. 45a-541h. Reviewing compliance. The prudent investor rule expresses a standard of conduct, not outcome. Compliance with the prudent investor rule is determined in light of the facts and circumstances existing at the time of a trustee's decision or action.

Sec. 45a-541i. Delegation of investment and management functions. (a) A trustee may delegate investment and management functions that a prudent trustee of comparable skills could properly delegate under the circumstances. The trustee shall exercise reasonable care, skill and caution in: (1) Selecting an agent; (2) establishing the scope and terms of the delegation, consistent with the purposes and terms of the trust; and (3) periodically reviewing the agent's actions in order to monitor the agent's performance and compliance with the scope and terms of the delegation.

(b) In performing a delegated function, an agent owes a duty to the trustee and to the trust to exercise reasonable care to comply with the scope and terms of the delegation and to exercise the delegated function with reasonable care, skill and caution. An attempted exoneration of the agent from liability for failure to meet such a duty is contrary to public policy and void.

(c) A trustee who complies with the requirements of subsection (a) of this section is not liable to the beneficiaries or to the trust for the decisions or actions of the agent to whom the function was delegated.

(d) By accepting the delegation of a trust function from the trustee of a trust that is subject to the law of this state, an agent submits to the jurisdiction of the courts of this state and can be held liable by the courts of this state for any breach of duty arising out of the delegation agreement or the terms of sections 45a-541 to 45a-541*l*, inclusive.

Sec. 45a-541j. Language invoking standards of act. The following terms or comparable language in a trust instrument, unless otherwise limited or modified by the instrument, authorizes any investment or strategy permitted under sections 45a-541 to 45a-541*l*, inclusive: "Investments permissible by law for investment of trust funds", "legal investments", "authorized investments", "using the judgment and care under the circumstances then prevailing that persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital", "prudent man rule", "prudent trustee rule", "prudent person rule", and "prudent investor rule".

Sec. 45a-541k. Uniformity of application and construction. Sections 45a-541 to 45a-541*l*, inclusive, shall be applied and construed to effectuate their general purpose to make uniform the law with respect to the subject of said sections among the states enacting them.

Sec. 45a-541*l*. Applicability. Section 45a-532 and sections 45a-541 to 45a-541*l*, inclusive, apply to trusts existing on and created after October 1, 1997. As applied to trusts existing on October 1, 1997, section 45a-532 and sections 45a-541 to 45a-541*l*, inclusive, govern only decisions or actions occurring after that date.

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§ 7-450. Establishment of pension and retirement systems or other past employment health and life benefit systems

C.G.S.A. § 7-450

§ 7-450. Establishment of pension and retirement systems or other past employment health and life benefit systems

Currentness

(a) Any municipality or subdivision thereof may, by ordinance, or with respect to a municipality not having the authority to make ordinances, by resolution adopted by a two-thirds vote of the members of its legislative body, establish pension, retirement, or other postemployment health and life benefit systems for its officers and employees and their beneficiaries, or amend any special act concerning its pension, retirement, or other postemployment health and life benefit systems, toward the maintenance in sound condition of a pension, retirement, or other postemployment health and life benefit fund or funds, provided the rights or benefits granted to any individual under any municipal pension or retirement system shall not be diminished or eliminated. The legislative body of any such municipality, by resolution adopted by a two-thirds vote of its members, may provide for pensions to persons, including survivors' benefits for widows of such persons, not included in such pension or retirement system.

(b) Notwithstanding the provisions of the general statutes or of any special act, charter, special act charter, home-rule ordinance, local ordinance or other local law, any municipality or subdivision thereof may, by ordinance and amendment thereto, or with respect to a municipality not having the authority to make ordinances, by resolution adopted by a two-thirds vote of the members of its legislative body, (1) establish one or more trusts, or determine to participate in a multiemployer trust, to hold and invest the assets of such pension, retirement or other postemployment health and life benefit system; (2) provide for the management and investment of such system and any such trust, including the establishment of a board or commission or the designation of an existing board or commission for such purposes; or (3) provide for the organization of and the manner of election or appointment of the members of such board or commission. Notwithstanding any limitations on the investment of municipal funds set forth in section 7-400, funds held in any such trust may be invested in accordance with the terms of the pension, retirement or other postemployment health and life benefit plan, as such terms may be amended from time to time. The investment and management of the assets of any such trust shall be in compliance with the prudent investor rule as set forth in sections 45a-541 to 45a-541*l*, inclusive.

(c) The provisions of subsections (a) and (b) of this section shall not operate to invalidate the establishment by any municipality or subdivision thereof, pursuant to the provisions of any public or special act, charter, special act charter, home-rule ordinance, local ordinance or local law, of any postemployment health and life benefit system duly established prior to October 1, 2005, or of any trust duly established or board or commission duly established or designated prior to July 1, 2006, with respect to a pension, retirement or other postemployment health and life benefit system.

Credits

(1949 Rev., § 903; 1957, P.A. 13, § 48; 1965, Feb.Sp.Sess., P.A. 338, § 1; 1967, P.A. 568, eff. Oct. 1, 1967; 1967, P.A. 642, § 1, eff. June 27, 1967; 2005, P.A. 05-202, § 2; 2006, P.A. 06-79, § 6, eff. July 1, 2006.)

Notes of Decisions (5)

C. G. S. A. § 7-450, CT ST § 7-450
The statutes and Constitution are current with enactments of the 2017 January Regular Session and the 2017 June Special Session.

End of Document

Indemnification
Norwalk City Code Sections
Chapter 67A

Chapter 67A. Municipal Liability

§ 67A-1. Indemnification.

(a) The City of Norwalk shall protect and save harmless and shall defend any lawsuit or administrative proceeding instituted against any municipal officer **or public member**, whether elected or appointed, of any board, committee, council, agency or commission of the City of Norwalk, or any municipal employee of the City of Norwalk from financial loss and expense, including legal fees and costs, if any, arising out of any claim, demand, suit or judgment by reason of alleged negligence, or for alleged infringement of any person's civil rights, on the part of such officer or such employee while acting in the discharge of his or her duties in accordance with applicable provisions of the Connecticut General Statutes including, but not limited to, Section 7-101a, as that section may be amended from time to time.

(b) In addition to the protection provided under subsection (a) of this section, the City of Norwalk shall protect and save harmless any such municipal officer, **public member** or municipal employee from financial loss and expense, including legal fees and costs, if any, arising out of any claim, demand or suit instituted against such officer or employee by reason of alleged malicious, wanton or willful act or ultra vires act, on the part of such officer, **public member** or employee while acting in the discharge of his or her duties. In the event such officer, **public member** or employee has a judgment entered against him or her for a malicious, wanton or willful act in a court of law or administrative body, the City of Norwalk shall be reimbursed by such officer, **public member** or employee for expenses it incurred in providing such defense and shall not be held liable to such officer, **public member** and employee for any financial loss or expense resulting from such act.

§ 67A-2. Defense provisions.

Except as otherwise provided in this chapter, the City of Norwalk shall defend any action brought against any municipal officer, **public member** or municipal employee. It shall not be liable for any judgment, settlement or for fees of attorneys or other costs if a municipal officer, **public member** or municipal employee does not notify the City Clerk, in writing, within 10 days of his/her first notice of presentation or institution of a claim or a lawsuit or chooses to defend any action on his or her own without the authority of the Mayor or the Corporation Counsel, unless it is determined that the City of Norwalk was required to represent the interests of such person and has failed to provide counsel for such person.

§ 67A-3. Notice of withdrawal of defense.

In the event that the City of Norwalk determines at any time that it will not defend or save harmless any municipal officer, **public member** or municipal employee as a result of the person's acts or omissions occurring not in the performance of governmental functions or within the scope of the person's duties or if the person has acted in bad faith and not in the exercise of honest judgment or has acted maliciously, wantonly or in abuse of his or her discretion, the Mayor or the Corporation Counsel shall give prompt written notice to the person that the City of Norwalk will withdraw coverage and provision of defense as established by this chapter. The Mayor shall deliver written notice of the withdrawal to the Common Council at its next regular meeting. The withdrawal shall be effective unless rejected by a resolution of the Common Council.

§ 67A-4. Notice of withdrawal of policy to save harmless.

In the event that the City of Norwalk determines, at the time of the institution of any suit or administrative proceeding or at any time during the course of said suit or proceeding, that it will not defend said action or proceeding or protect and save harmless any municipal officer, **public member** or municipal employee as a result of the person's acts or omissions occurring not in the performance of governmental functions or within the scope of the person's duties or if the person has acted in bad faith and not in the exercise of honest judgment or has acted maliciously, wantonly or in abuse of his or her discretion, the Mayor or the Corporation Council shall give prompt written notice to the person that the City of Norwalk will not defend and shall not protect and save harmless from any judgment or order entered in the lawsuit or administrative proceeding. The Mayor shall deliver written notice of the withdrawal to the Common Council at its next regular meeting. The withdrawal shall be effective unless rejected by a resolution of the Common Council: provided,. further, that, in an appropriate case as determined by the Corporation Counsel, the City of Norwalk may elect to defend said person under a reservation of rights upon written notice to the person of such reservation of rights and upon informing the individual of a right to seek independent counsel.

§ 67A-5. Effect of existing coverage.

In the event that any municipal officer, **public member** or municipal employee are covered by an insurance policy in effect at the effective date of this chapter, this chapter shall not take effect as to the municipal officer, **public member** or municipal employee until the City Clerk has been advised, in writing, by the board, committee, council, agency or commission that the current insurance has terminated by reason of expiration or nonrenewal by the insurer.

401 – Defined Contribution Plan

Chapter ___

401(a) - Defined Contribution Plan

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§ __-1. Authority; establishment.

Pursuant to the authority granted to said Common Council of the City of Norwalk, Connecticut in § 189 of the Norwalk City Charter and § 7-450 of the Connecticut General Statutes, there shall be created and established for such City the 401(a) Money Purchase Plan ("401(a) Plan") in order to provide retirement benefits to certain employees of the City and Board of Education in accordance with the requirements of § 401(a) of the Internal Revenue Code of 1986, as amended.

§ __-2. Defined Contribution Board.

The Norwalk City Employees' Pension Board shall be designated as the fiduciary of the 401(a) Plan, and shall have all of the powers and responsibilities of the fiduciary of the 401(a) Plan as provided by Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended. The members of this Defined Contribution Board shall receive no compensation for their service.

§ __-3. Allocation of Defined Contributions.

A. Separate accounting. The Defined Contribution Board shall establish and maintain an account in the name of each participant to which the Defined Contribution Board shall credit all defined contribution amounts allocated to each such participant as set forth herein.

B. Allocation of contributions. The City shall provide the Defined Contribution Board with all information required by it to make a proper allocation of the City's defined contribution plan contribution for each plan year. Within a reasonable period of time after the date of receipt by the Defined Contribution Board of such information, the Defined Contribution Board shall allocate any City 401(a) plan contributions proportionately among the participants of the 401(a) Plan as provided herein.

C. The Defined Contribution Board shall have the authority to delegate these custodial responsibilities to other parties, including but not limited to, institutional trustees, investment advisors, investment managers and third-party administrators ("qualified financial institutions").

§ __-4. Defined Contribution - Participant Accounts.

A. Participant accounts. The Defined Contribution Board shall create and maintain adequate records to disclose the interest of each participant, former participant, and beneficiary in such participant's separate 401(a) Plan account. Such records shall be in the form of individual accounts to which shall be credited the participant's employee 401(a) Plan contributions, the City 401(a) Plan contributions allocable to the participant as provided herein, and the aggregate of all earnings and losses on such account.

B. Participant directed investments. Each participant may designate, in accordance with the procedures established from time to time by the Defined Contribution Board, the manner in which the amounts allocated to each of his or her account shall be invested from among the investment funds made available from time to time by the Defined Contribution Board. That portion of the interest of any participant so directing will thereupon be considered a participant's directed account. If a participant fails to make a designation, then his or her account shall be invested in the investment fund or funds designated by the Defined Contribution Board from time to time in a uniform manner. A participant may change his or her investment designation for future contributions to be allocated to his or her account. Any such change shall be made in accordance with procedures established by the Defined Contribution Board and the frequency of such change may be limited by such procedures. A participant may elect to convert his or her investment designation with respect to the amounts already allocated to his or her account. Any such conversion shall be made in accordance with the procedures established by the Defined Contribution Board, and the frequency of such conversions may be limited by such procedures.

C. All participant directed accounts shall be charged or credited with net earnings, gains, losses and expenses as well as any appreciation or depreciation in the market value using publicly listed fair market values in accordance with procedures established from time to time by the Defined Contribution Board. The Defined Contribution Board shall ensure proper administration of the 401(a) Plan.

D. The Defined Contribution Board shall have the authority to delegate these custodial responsibilities to qualified financial institutions.

§ __-5. Vesting.

All employees shall be 100 percent vested in the City's accounts after five (5) continuous years of service with the City. The employee is vested in his or her own contributions and any accrued interest thereon immediately. The vesting schedule is only for the purposes of ownership in the City's contributions and the accrued interest thereon.

§ __-6. Contributions.

The City shall contribute to each employee's account an amount of five (5.0) percent of the employee's base pay. The employee shall contribute an amount of five (5.0) percent of his or her base pay.

§ ___-7. Powers and Duties of Defined Contribution Board.

A. The Defined Contribution Board shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 401(a) Plan in accordance with the provisions of the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended. The agreement may be modified or amended, as appropriate, in accordance with applicable law, upon the recommendation of the Defined Contribution Board and approval of the majority of the entire Common Council.

B. The Defined Contribution Board shall perform the duties set forth in the following documents ("401(a) Documents"):

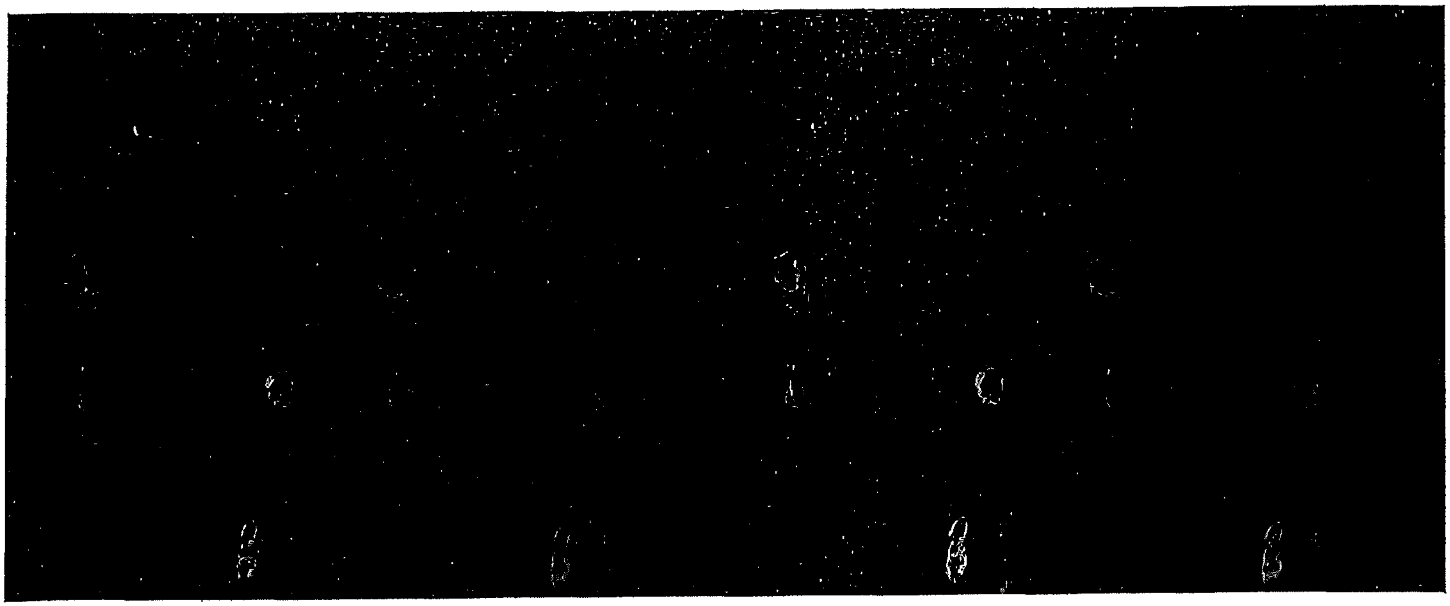
   1. (a) 401 Government Money Purchase Plan and Trust Basic Document; (b) the City of Norwalk's 401a Defined Contribution Retirement Plan Investment Policy Statement; and (c) the Administrative Service Agreement between ICMA Retirement Corporation and the City of Norwalk.

§ ___-8. Indemnification of Defined Contribution Board; Hold Harmless.

No member of the Defined Contribution Board, nor any other person involved in the administration of the 401(a) Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties under the terms of the 401(a) Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City shall indemnify and hold harmless the Defined Contribution Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Defined Contribution Board. If the City purchases insurance to cover claims of a nature described above, then there shall be no right of indemnification except to the extent of any deductible amount under the insurance coverage or to the extent of the amount the claims exceed the insured amount.

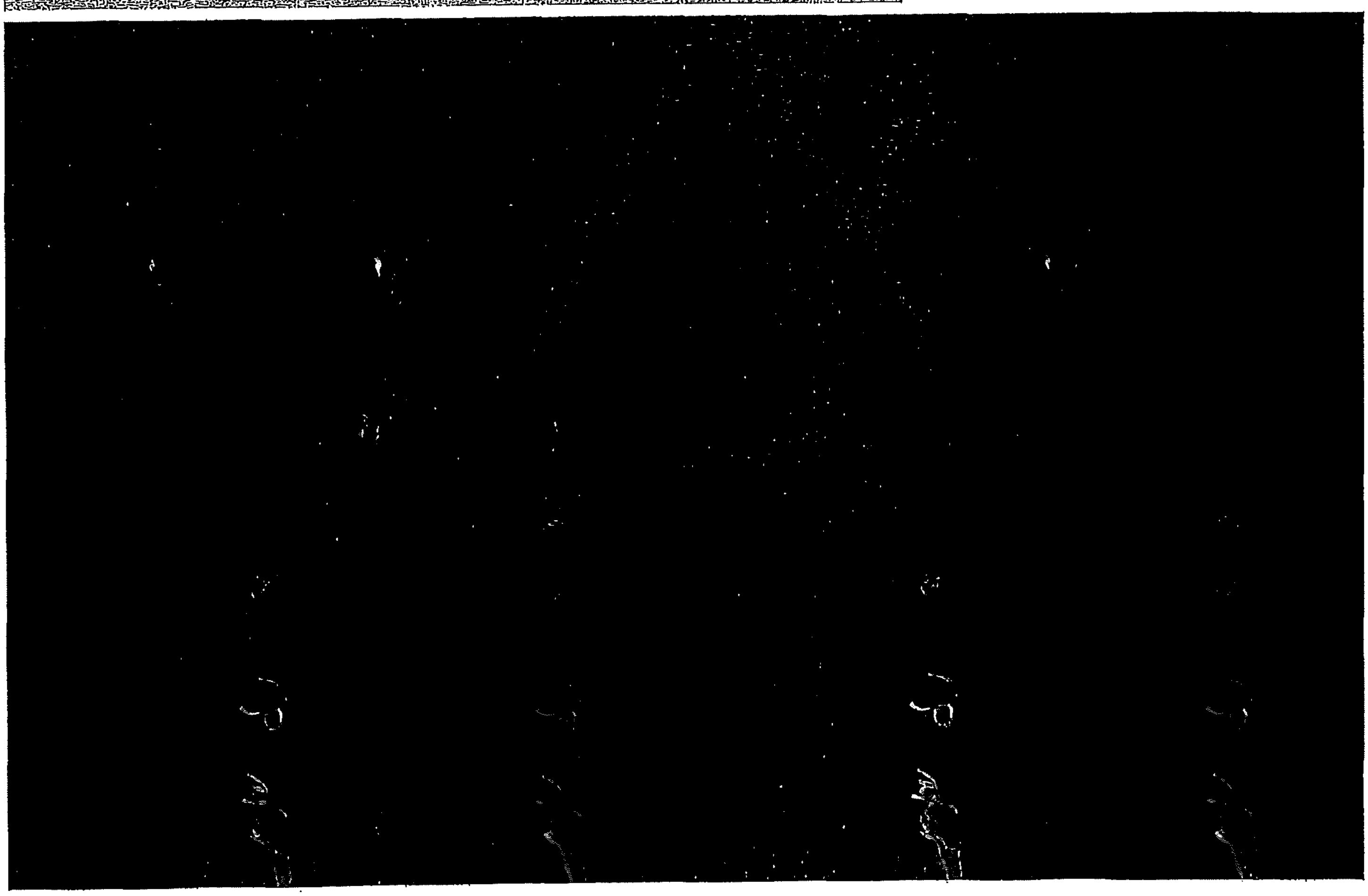
§ ___- 9. Conflict of Interest.

If any board member has a direct or indirect business relationship with a vendor or service provider, he or she must disclose it to the board. Such a business relationship can include an ownership interest, self-employment with the vendor or service provider or employment by a board member's immediate family. That board member shall recuse himself from the decisions of the board to use that vendor or service provider and it will be noted in the minutes of the meeting. No board member shall unduly profit from his or her association with any vendor or service. At the beginning of each calendar year, any board member must disclose any such interest in writing to the Chairperson of the board.



401 Governmental Money Purchase Plan & Trust Basic Document

ICMARC



ICMA RETIREMENT CORPORATION
GOVERNMENTAL MONEY PURCHASE PLAN & TRUST
BASIC DOCUMENT

Table of Contents

XV. ADMINISTRATION

15.1 Powers of the Employer. The Employer shall have the following powers and duties:

(a) To appoint and remove, with or without cause, the Plan Administrator;

(b) To amend or terminate the Plan pursuant to the provisions of Article XIV;

(c) To appoint a committee to facilitate administration of the Plan and communications to Participants;

(d) To decide all questions of eligibility (1) for Plan participation, and (2) upon appeal by any Participant, Employee or Beneficiary, for the payment of benefits;

(e) To engage an independent qualified public accountant, when required to do so by law, to prepare annually the audited financial statements of the Plan's operation;

(f) To take all actions and to communicate to the Plan Administrator in writing all necessary information to carry out the terms of the Plan and Trust; and

(g) To notify the Plan Administrator in writing of the termination of the Plan; and

(h) The Defined Contribution Board as defined in Norwalk's City Code shall be designated fiduciary of the 401 Plan. The Defined Contribution Board shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 401 Plan. The Defined Contribution Board shall monitor, evaluate, oversee, revise and administer the 401 Plan in compliance with the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-451 through 45a-541l, as amended.

15.2 Duties of the Plan Administrator. The Plan Administrator shall have the following powers and duties:

(a) To construe and interpret the provisions of the Plan;

(b) To maintain and provide such returns, reports, schedules, descriptions, and individual Account statements, as are required by law within the times prescribed by law; and to furnish to the Employer, upon request, copies of any or all such materials, and further, to make copies of such instruments, reports, descriptions, and statements as are required by law available for examination by Participants and such of their Beneficiaries who are or may be entitled to benefits under the Plan in such places and in such manner as required by law;

(c) To obtain from the Employer such information as shall be necessary for the proper administration of the Plan;

(d) To determine the amount, manner, and time of payment of benefits hereunder;

(e) To appoint and retain such agents, counsel, and accountants for the purpose of properly administering the Plan;

(f) To distribute assets of the Trust to each Participant and Beneficiary in accordance with Article X of the Plan;

(g) To pay expenses from the Trust pursuant to Section 6.03 of the Plan; and as elected by the Participant. The Employer may limit the amount of Accrued Leave to be elected to be contributed to the Plan. Once elected, an Employee's election shall remain in force and may not be revised or revoked.

The Employee Designated Accrued Leave Contributions shall be accounted for in the Participant Contribution Account, and are nonforfeitable by the Participant at all times.

The Employee Designated Accrued Leave Contributions shall be "picked up" by the Employer in accordance with Code section 414(h)(2). The contributions shall be treated as an employer contribution in determining the tax treatment under the Code, and shall not be included as gross income of the Participant until it is distributed.

A Participant cannot elect to receive cash in lieu of any Accrued Leave Contribution.

19.3 Equivalencies. The Accrued Leave Contribution shall be determined by multiplying the Participant's current daily rate of pay from the Employer times the amount of accrued unpaid leave being converted.

19.4 Excess Contributions. Accrued Leave Contributions are limited to the extent of applicable law and any Code limitation. No Accrued Leave Contribution shall be made to the extent that it would exceed the applicable Code section 415 limitation, as set forth in Article V. Any excess contributions as a result of the Code section 415 limitation shall remain in the Participant's leave bank.

XX. Liability

Neither the Employer nor the Administrator shall be liable for losses arising from depreciation or shrinkage in the value of any investments acquired under this Plan. No member of the Defined Contribution Board, nor any other person involved in the administration of the 401 Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties under the terms of the 401 Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City of Norwalk shall indemnify and hold harmless the Defined Contribution Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Defined Contribution Board.

Chapter ___

401(a) - Defined Contribution Plan

---

§ __-1. Authority; establishment.

Pursuant to the authority granted to said Common Council of the City of Norwalk, Connecticut in § 189 of the Norwalk City Charter and § 7-450 of the Connecticut General Statutes, there shall be created and established for such City the 401(a) Money Purchase Plan ("401(a) Plan") in order to provide retirement benefits to certain employees of the City and Board of Education in accordance with the requirements of § 401(a) of the Internal Revenue Code of 1986, as amended.

§ __-2. Defined Contribution Board.

The Norwalk City Employees' Pension Board shall be designated as the fiduciary of the 401(a) Plan, and shall have all of the powers and responsibilities of the fiduciary of the 401(a) Plan as provided by Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended~~applicable law~~. The members of this Defined Contribution Board shall receive no compensation for their service.

§ __-3. Allocation of Defined Contributions.

A. Separate accounting. The Defined Contribution Board shall establish and maintain an account in the name of each participant to which the Defined Contribution Board shall credit all defined contribution amounts allocated to each such participant as set forth herein.

B. Allocation of contributions. The City shall provide the Defined Contribution Board with all information required by it to make a proper allocation of the City's defined contribution plan contribution for each plan year. Within a reasonable period of time after the date of receipt by the Defined Contribution Board of such information, the Defined Contribution Board shall allocate any City 401(a) plan contributions proportionately among the participants of the 401(a) Plan as provided herein.

C. The Defined Contribution Board shall have the authority to delegate these custodial responsibilities to other parties, including but not limited to, institutional trustees, investment advisors, investment managers and third-party administrators ("qualified financial institutions").

§ __-4. Defined Contribution - Participant Accounts.

A. Participant accounts. The Defined Contribution Board shall create and maintain adequate records to disclose the interest of each participant, former participant, and beneficiary in such participant's separate 401(a) Plan account. Such records shall be in the form of individual accounts to which shall be credited the participant's employee 401(a) Plan contributions, the City 401(a) Plan contributions allocable to the participant as provided herein, and the aggregate of all earnings and losses on such account.

B. Participant directed investments. Each participant may designate, in accordance with the procedures established from time to time by the Defined Contribution Board, the manner in which the amounts allocated to each of his or her account shall be invested from among the investment funds made available from time to time by the Defined Contribution Board. That portion of the interest of any participant so directing will thereupon be considered a participant's directed account. If a participant fails to make a designation, then his or her account shall be invested in the investment fund or funds designated by the Defined Contribution Board from time to time in a uniform manner. A participant may change his or her investment designation for future contributions to be allocated to his or her account. Any such change shall be made in accordance with procedures established by the Defined Contribution Board and the frequency of such change may be limited by such procedures. A participant may elect to convert his or her investment designation with respect to the amounts already allocated to his or her account. Any such conversion shall be made in accordance with the procedures established by the Defined Contribution Board, and the frequency of such conversions may be limited by such procedures.

C. All participant directed accounts shall be charged or credited with net earnings, gains, losses and expenses as well as any appreciation or depreciation in the market value using publicly listed fair market values in accordance with procedures established from time to time by the Defined Contribution Board. The Defined Contribution Board shall ensure proper administration of the 401(a) Plan.

D. The Defined Contribution Board shall have the authority to delegate these custodial responsibilities to qualified financial institutions.

§ __-5. Vesting.

All employees shall be 100 percent vested in the City's accounts after five (5) continuous years of service with the City. The employee is vested in his or her own contributions and any accrued interest thereon immediately. The vesting schedule is only for the purposes of ownership in the City's contributions and the accrued interest thereon.

~~**§ __-6. Meetings.**~~

~~Meetings shall be held at such time and place as determined by the chairperson, except that a meeting shall be held to consider a petition for hardship distribution within forty five (45) days of such petition being filed.~~

§ __-6~~7~~. Contributions.

The City shall contribute to each employee's account an amount of five (5.0) percent of the employee's base pay. The employee shall contribute an amount of five (5.0) percent of his or her base pay.

§ ___-87. Powers and Duties of Defined Contribution Board.

~~A.~~The Defined Contribution Board shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 401(a) Plan~~.~~

~~B.~~A. ~~The City, acting through the Mayor, and the Defined Contribution Board are authorized and directed to enter into an agreement to govern and control the administration, management and investment of the 401(a) Plan and the assets thereof~~ in accordance with the provisions of the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended. The agreement may be modified or amended, as appropriate, in accordance with applicable law, upon the recommendation of the Defined Contribution Board and approval of the majority of the entire Common Council.

~~C. The members of the Defined Contribution Board shall annually select a chairperson from within said board.~~

~~D.~~B. The Defined Contribution Board shall perform the duties set forth in the following documents ("401(a) Documents"):

1. (a) 401 Government Money Purchase Plan and Trust Basic Document; (b) the City of Norwalk's 401a Defined Contribution Retirement Plan Investment Policy Statement; and (c) the Administrative Service Agreement between ICMA Retirement Corporation and the City of Norwalk.

~~E. The Defined Contribution Board shall also perform the duties set forth in the Connecticut Uniform Prudent Investor Rule, Conn. Gen. Stats. § 45a-451 through 45a-541l, as amended, with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and purpose.~~

~~F. The Defined Contribution Board shall have the authority to delegate some or all of their custodial responsibilities to qualified financial institutions. Such qualified financial institutions shall oversee the administration of the plan and the investment of assets in compliance with the 401(a) Documents and the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended, from time to time.~~

~~G. If the Defined Contribution Board delegate and appoint a qualified financial institution to oversee the administration of the plan and the investment of assets, then except as otherwise provided by applicable law, the Defined Contribution Board shall have no liability:~~

~~1. for the acts or omissions of the qualified financial institution;~~

~~2. for following the investment directions of a qualified financial institution;~~

~~3. for failing to act in the absence of qualified financial institution direction; or~~

~~4.~~1. ~~for any diminution in the value of the 401(a) Plan as a result of following the direction of the qualified financial institution.~~

~~H. Even if the Defined Contribution Board delegate some or all of their custodial responsibility to manage the 401(a) Plan to another party or parties, they still shall comply with their the duties as set forth in the 401(a) Documents and the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended, from time to time.~~

~~I. The Defined Contribution Board shall have the following additional duties and responsibilities:~~

~~1. establishing investment options/policies available to participants;~~

~~2. providing the plan information and documentation to participants;~~

~~3. organizing and assisting participants with regular meetings concerning the plan;~~

~~4. maintaining an investment advisory committee to act as a liaison for the participants;~~

~~5. identifying investment options within each asset class that it deems appropriate and prudent;~~

~~6. monitoring the investment results by means of regular review and analysis;~~

~~7. monitoring plan expenses, fees and costs;~~

~~8. retaining service providers to assist in the functioning of the plan and ensuring a comprehensive participant communication program to assist the participants in making informed decisions about investment contributions and choices;~~

~~9. hiring service providers and evaluating the success of those providers;~~

~~10. hiring qualified financial institutions to oversee the administration of the plan and the investments, monitoring these qualified financial institutions and evaluating these qualified financial institutions;~~

~~11. maintaining records for all employee accounts;~~

~~12. establishing individual accounts for employees; and~~

~~13. maintaining individual accounts for employees.~~

~~J. The Defined Contribution Board shall have the authority to delegate some or all of the duties and responsibilities identified in Section __8(I) to other parties.~~

§ ___-89. Indemnification of Defined Contribution Board; Hold Harmless.

No member of the Defined Contribution Board, nor any other person involved in the administration of the 401(a) Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties under the terms of the 401(a) Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City shall indemnify and hold harmless the Defined Contribution Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Defined Contribution Board. If the City purchases insurance to cover claims of a nature described above, then there shall be no right of indemnification except to the extent of any deductible amount under the insurance coverage or to the extent of the amount the claims exceed the insured amount.

§ ___- 9. Conflict of Interest.

If any board member has a direct or indirect business relationship with a vendor or service provider, he or she must disclose it to the board. Such a business relationship can include an ownership interest, self-employment with the vendor or service provider or employment by a board member's immediate family. That board member shall recuse himself from the decisions of the board to use that vendor or service provider and it will be noted in the minutes of the meeting. No board member shall unduly profit from his or her association with any vendor or service. At the beginning of each calendar year, any board member must disclose any such interest in writing to the Chairperson of the board.

457 – Deferred Compensation Plan

Chapter ___

457 – Deferred Compensation Plan

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§ __-1. Authority; establishment.

Pursuant to the authority granted to said Common Council of the City of Norwalk, Connecticut in § 189 of the Norwalk City Charter and § 7-450 of the Connecticut General Statutes, there shall be created and established for such City the 457 Deferred Compensation Plan ("457 Plan") in order to provide retirement benefits to certain employees of the City and Board of Education in accordance with the requirements of § 457 of the Internal Revenue Code of 1986, as amended.

§ __-2. Defined Contribution Plan Board.

The Norwalk City Employees' Pension Board shall be designated as the fiduciary of the 457 Plan, and shall have all of the powers and responsibilities of the fiduciary of the 457 Plan as provided by Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended. The members of this Deferred Compensation Plan Board shall receive no compensation for their service.

§ __-3. Allocation of Deferred Compensation Plan Contributions.

A. Separate accounting. The Deferred Compensation Board shall establish and maintain an account in the name of each participant to which the Deferred Compensation Board shall credit all deferred compensation amounts allocated to each such participant as set forth herein.

B. The Deferred Compensation Board shall have the authority to delegate these custodial responsibilities to other parties, including but not limited to, institutional trustees, investment advisors, investment managers and third-party administrators ("qualified financial institutions").

§ __-4. 457 Plan - Participant Accounts.

A. Participant accounts. The Deferred Compensation Board shall create and maintain adequate records to disclose the interest of each participant, former participant, and beneficiary in such participant's separate defined contribution plan account. Such records shall be in the form of individual accounts to which shall be credited the participant's employee 457 Plan contributions, and the aggregate of all earnings and losses on such account.

B. Participant directed investments. Each participant may designate, in accordance with the procedures established from time to time by the Deferred Compensation Board, the manner in which the amounts allocated to each of his or her account shall be invested from among the investment funds made available from time to time by the Deferred Compensation Board. That portion of the interest of any participant so directing will thereupon be considered a participant's directed account. If a participant fails to make a designation, then his or her account shall be invested in the investment fund or funds designated by the Deferred Compensation Board from time to time in a uniform manner. A participant may change his or her investment designation for future contributions to be allocated to his or her account. Any such change shall be made in accordance with procedures established by the Deferred Compensation Board and the frequency of such change may be limited by such procedures. A participant may elect to convert his or her investment designation with respect to the amounts already allocated to his or her account. Any such conversion shall be made in accordance with the procedures established by the Deferred Compensation Board, and the frequency of such conversions may be limited by such procedures.

C. All participant directed accounts shall be charged or credited with net earnings, gains, losses and expenses as well as any appreciation or depreciation in the market value using publicly listed fair market values in accordance with procedures established from time to time by the Deferred Compensation Board. The Deferred Compensation Board shall ensure proper administration of the 457 Plan.

D. The Deferred Compensation Board shall have the authority to delegate these custodial responsibilities to qualified financial institutions.

§ __-5. Vesting.

All employees shall be 100 percent vested in his or her own contributions and any accrued interest thereon immediately.

§ ___-6. Powers and Duties of Deferred Compensation Board.

A. The Deferred Compensation Board shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 457 Plan in accordance with the provisions of the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended.

B. The Deferred Compensation Board shall perform the duties set forth in the following documents ("457 Documents"):

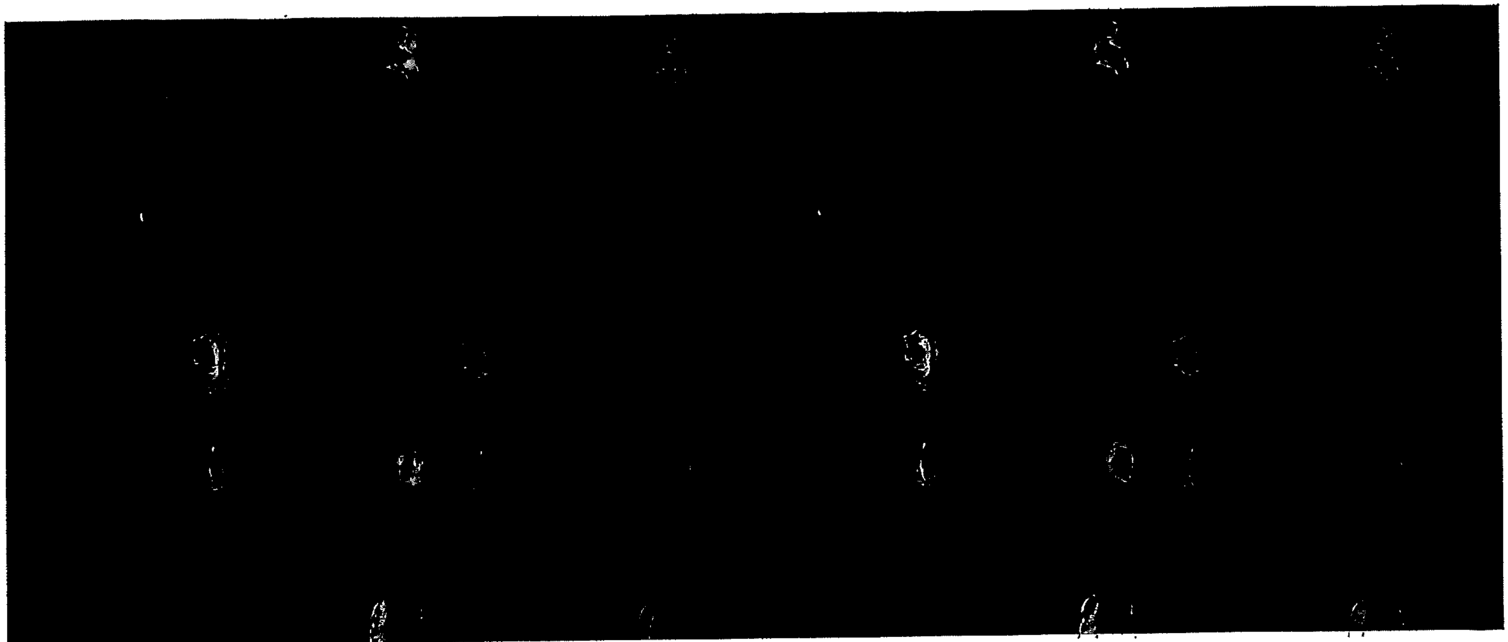
1. (a). 457 Governmental Deferred Compensation Plan and Trust; and (b) The City of Norwalk's Policy Statement for the 457 Deferred Compensation Retirement Plan. .

§ ___-7. Indemnification of Deferred Compensation Board; Hold Harmless.

No member of the Deferred Compensation Board, nor any other person involved in the administration of the 457 Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties under the terms of the 457 Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City shall indemnify and hold harmless the Deferred Compensation Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Deferred Compensation Board. If the City purchases insurance to cover claims of a nature described above, then there shall be no right of indemnification except to the extent of any deductible amount under the insurance coverage or to the extent of the amount the claims exceed the insured amount.

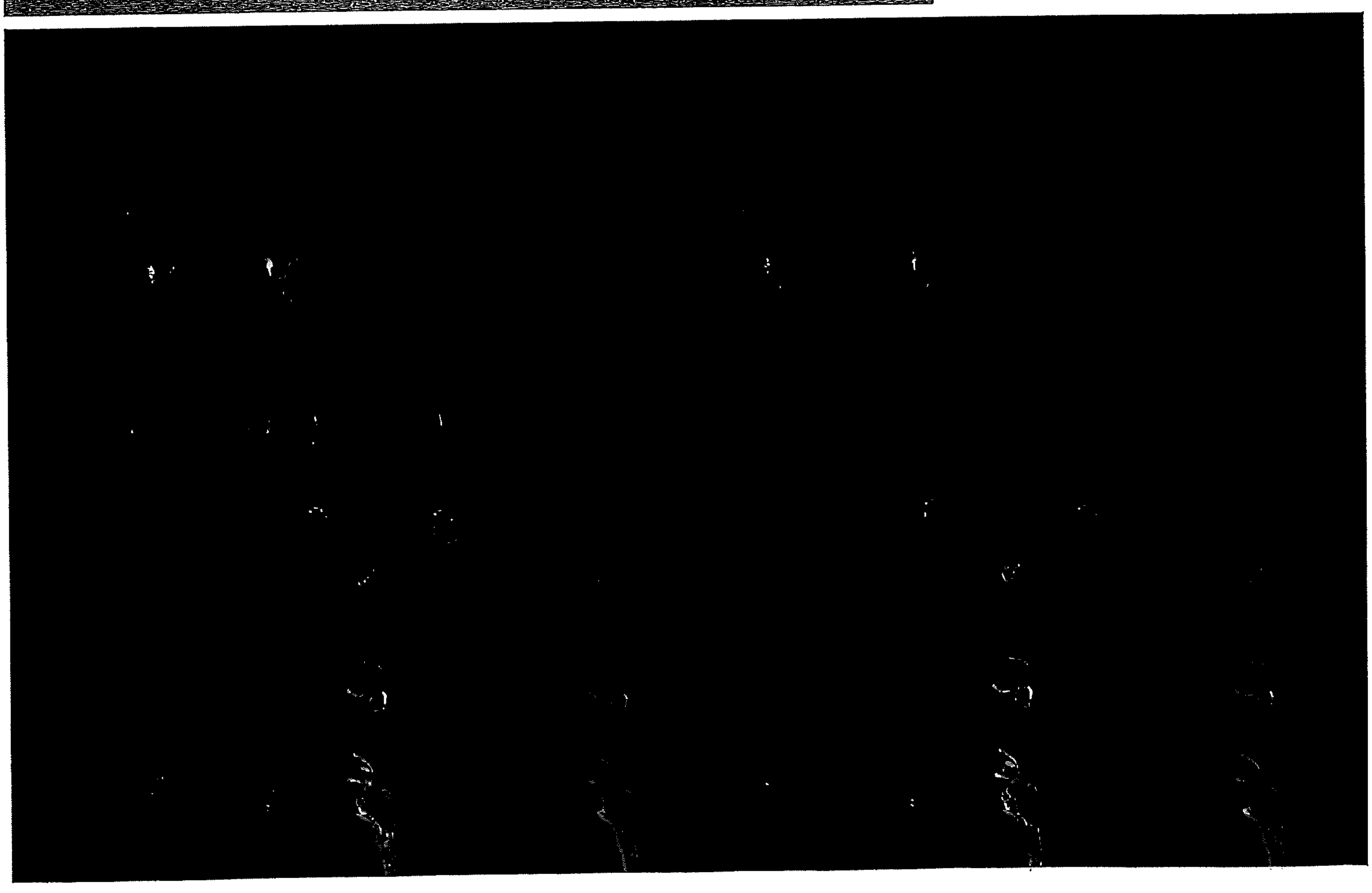
§ ___- 8. Conflict of Interest.

If any board member has a direct or indirect business relationship with a vendor or service provider, he or she must disclose it to the board. Such a business relationship can include an ownership interest, self-employment with the vendor or service provider or employment by a board member's immediate family. That board member shall recuse himself from the decisions of the board to use that vendor or service provider and it will be noted in the minutes of the meeting. No board member shall unduly profit from his or her association with any vendor or service. At the beginning of each calendar year, any board member must disclose any such interest in writing to the Chairperson of the board.



457 Governmental Deferred Compensation Plan & Trust

ICMARC
Building Retirement Security



2.16 Participant. Any Employee who has joined the Plan pursuant to the requirements of Article IV. For purposes of section 6.11 of the Plan, the term Participant includes an employee or former Employee of the Employer who has not yet received all of the payments of benefits to which he/she is entitled under the Plan.

2.17 Percentage Limitation. 100 percent of the participant's Includible Compensation available to be contributed as Deferred Compensation for the taxable year.

2.18 Plan Year. The calendar year.

2.19 Retirement. The first date upon which both of the following shall have occurred with respect to a participant: Severance Event and attainment of age 65.

2.20 Severance Event. A severance of the Participant's employment with the Employer within the meaning of Section 457(d)(1)(A)(ii) of the Code.

In general, a Participant shall be deemed to have experienced a Severance Event for purposes of this Plan when, in accordance with the established practices of the Employer, the employment relationship is considered to have actually terminated. In the case of a Participant who is an independent contractor of the Employer, a Severance Event shall be deemed to have occurred when the Participant's contract under which services are performed has completely expired and terminated, there is no foreseeable possibility that the Employer will renew the contract or enter into a new contract for the Participant's services, and it is not anticipated that the Participant will become an Employee of the Employer, or such other events as may be permitted under the Code.

2.21 Trust. The Trust created under Article VI of the Plan which shall consist of all compensation deferred under the Plan, plus any income and gains thereon, less any losses, expenses and distributions to Participants and Beneficiaries.

Article III. Administration

3.1 Duties of the Employer. The Employer shall have the authority to make all discretionary decisions affecting the rights or benefits of Participants which may be required in the administration of this Plan. The Employer's decisions shall be afforded the maximum deference permitted by applicable law. The Deferred Compensation Board as defined in Norwalk's City Code shall be designated a fiduciary of the 457 Plan. The Deferred Compensation Board shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 457 Plan. The Deferred Compensation Board shall monitor, evaluate, oversee, revise and administer the 457 Plan in compliance with the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended.

3.2 Duties of Administrator. The Administrator, as agent for the Employer, shall perform nondiscretionary administrative functions in connection with the Plan, including the maintenance of Participants' Accounts, the provision of periodic reports of the status of each Account, and the disbursement of benefits on behalf of the Employer in accordance with the provisions of this Plan.

Article IV. Participation in the Plan

4.1 Initial Participation. An Employee may become a Participant by entering into a Joinder Agreement prior to the beginning of the calendar month in which the Joinder Agreement is to become effective to defer compensation not yet earned, or such other date as may be permitted under the Code. A new employee may defer compensation in the calendar month during which he or she first becomes an employee if a Joinder Agreement is entered into on or before the first day on which the employee performs services for the Employer.

4.2 Amendment of Joinder Agreement. A Participant may amend an executed Joinder Agreement to change the amount of Includible Compensation not yet earned which is to be deferred (including the reduction of such future deferrals to zero). Such amendment shall become effective as of the beginning of the calendar month commencing include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated beneficiary, or for a specified period of ten years or more; any distribution to the extent such distribution is required under Sections 401(a)(9) and 457(d)(2) of the Code; and any distribution made as a result of an unforeseeable emergency of the employee. For purposes of distributions from other eligible retirement plans rolled over into this Plan, the term eligible rollover distribution shall not include the portion of any distribution that is not includible in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to employer securities), such as after-tax contributions.

(2) *Eligible Retirement Plan*: An eligible retirement plan is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Sections 403(a) or 403(b) of the Code, a qualified trust described in Section 401(a) of the Code, or an eligible deferred compensation plan described in Section 457(b) of the Code which is maintained by an eligible governmental employer described in Section 457(e)(1)(A) of the Code, that accepts the distributee's eligible rollover distribution.

(3) *Distributee*: A distributee includes an employee or former employee. In addition, the employee's or former employee's surviving spouse and the employee's or former employee's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

(4) *Direct Rollover*: A direct rollover is a payment by the plan to the eligible retirement plan specified by the distributee.

6.12 Trustee-to-Trustee Transfers to Purchase Permissive Service Credit. All or a portion of a Participant's Account may be transferred directly to the trustee of a defined benefit governmental plan (as defined in Section 414(d) of the Code) if such transfer is (a) for the purchase of permissive service credit (as defined in Section 415(n)(3)(A) of the Code) under such plan, or (b) a repayment to which Section 415 of the Code does not apply by reason of subsection (k)(3) thereof, within the meaning of Section 457(e)(17) of the Code.

6.13 Treatment of Distributions of Amounts Previously Rolled Over From 401(a) and 403(b) Plans and IRAs. For purposes of Section 72(t) of the Code, a distribution from this Plan shall be treated as a distribution from a qualified retirement plan described in Section 4974(c)(1) of the Code to the extent that such distribution is attributable to an amount transferred to an eligible deferred compensation plan from a qualified retirement plan (as defined in Section 4974(c) of the Code).

6.14 Employer Liability. In no event shall the Employer's liability to pay benefits to a Participant under this Plan exceed the value of the amounts credited to the Participant's Account; neither the Employer nor the Administrator shall be liable for losses arising from depreciation or shrinkage in the value of any investments acquired under this Plan. No member of the Deferred Compensation Board, nor any other person involved in the administration of the 457 Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties. under the terms of the 457 Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City of Norwalk shall indemnify and hold harmless the Deferred Compensation Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Deferred Compensation Board.

Article VII. Benefits

7.1 Retirement Benefits and Election on Severance Event.

(a) *General Rule*: Except as otherwise provided in this Article VII, the distribution of a Participant's Account

Chapter ___

457 – Deferred Compensation Plan

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§ __-1. Authority; establishment.

Pursuant to the authority granted to said Common Council of the City of Norwalk, Connecticut in § 189 of the Norwalk City Charter and § 7-450 of the Connecticut General Statutes, there shall be created and established for such City the 457 Deferred Compensation Plan ("457 Plan") in order to provide retirement benefits to certain employees of the City and Board of Education in accordance with the requirements of § 457 of the Internal Revenue Code of 1986, as amended.

§ __-2. Defined Contribution Plan Board.

The Norwalk City Employees' Pension Board shall be designated as the fiduciary of the 457 Plan, and shall have all of the powers and responsibilities of the fiduciary of the 457 Plan as provided by Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended~~applicable law~~. The members of this Deferred Compensation Plan Board shall receive no compensation for their service.

§ __-3. Allocation of Deferred Compensation Plan Contributions.

A. Separate accounting. The Deferred Compensation Board shall establish and maintain an account in the name of each participant to which the Deferred Compensation Board shall credit all deferred compensation amounts allocated to each such participant as set forth herein.

B. The Deferred Compensation Board shall have the authority to delegate these custodial responsibilities to other parties, including but not limited to, institutional trustees, investment advisors, investment managers and third-party administrators ("qualified financial institutions").

§ __-4. 457 Plan - Participant Accounts.

A. Participant accounts. The Deferred Compensation Board shall create and maintain adequate records to disclose the interest of each participant, former participant, and beneficiary in such participant's separate defined contribution plan account. Such records shall be in the form of individual accounts to which shall be credited the participant's employee 457 Plan contributions, and the aggregate of all earnings and losses on such account.

B. Participant directed investments. Each participant may designate, in accordance with the procedures established from time to time by the Deferred Compensation Board, the manner in which the amounts allocated to each of his or her account shall be invested from among the investment funds made available from time to time by the Deferred Compensation Board. That portion of the interest of any participant so directing will thereupon be considered a participant's directed account. If a participant fails to make a designation, then his or her account shall be invested in the investment fund or funds designated by the Deferred Compensation Board from time to time in a uniform manner. A participant may change his or her investment designation for future contributions to be allocated to his or her account. Any such change shall be made in accordance with procedures established by the Deferred Compensation Board and the frequency of such change may be limited by such procedures. A participant may elect to convert his or her investment designation with respect to the amounts already allocated to his or her account. Any such conversion shall be made in accordance with the procedures established by the Deferred Compensation Board, and the frequency of such conversions may be limited by such procedures.

C. All participant directed accounts shall be charged or credited with net earnings, gains, losses and expenses as well as any appreciation or depreciation in the market value using publicly listed fair market values in accordance with procedures established from time to time by the Deferred Compensation Board. The Deferred Compensation Board shall ensure proper administration of the 457 Plan.

D. The Deferred Compensation Board shall have the authority to delegate these custodial responsibilities to qualified financial institutions.

§ __-5. Vesting.

All employees shall be 100 percent vested in his or her own contributions and any accrued interest thereon immediately.

~~**§ __-6. Meetings.**~~

~~Meetings shall be held at such time and place as determined by the chairperson, except that a meeting shall be held to consider a petition for hardship distribution within forty five (45) days of such petition being filed.~~

§ ___-6~~7~~. Powers and Duties of Deferred Compensation Board.

~~A.~~ The Deferred Compensation Board ~~S~~shall be responsible for establishing, monitoring, evaluating, overseeing, revising and administering the 457 Plan~~.~~

~~B. Shall be responsible for reviewing the performance of the 457 Plan.~~

~~C.~~A. ~~The City, acting through the Mayor, and the Deferred Compensation Board are authorized and directed to enter into an agreement to govern and control the administration, management and investment of the 457 Plan and the assets thereof~~ in accordance with the provisions of the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended. ~~The agreement may be modified or amended, as appropriate, in accordance with applicable law, upon the~~

~~recommendation of the Deferred Compensation Board and approval of the majority of the entire Common Council.~~

~~D.~~B. ~~Shall annually select a chairperson from within said board.~~

~~E.~~C. The Deferred Compensation Board shall perform the duties set forth in the following documents ("457 Documents"):

1. (a) 457 Governmental Deferred Compensation Plan and Trust; and (b) The City of Norwalk's Policy Statement for the 457 Deferred Compensation Retirement Plan. ~~457 Document~~.

~~F. Shall perform the duties set forth in the Connecticut Uniform Prudent Investor Rule, Conn. Gen. Stats. § 45a-451 through 45a-541l, as amended, with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character and purpose.~~

~~G.~~D. ~~Shall have the authority to delegate some or all of their custodial responsibilities to other parties, including, but not limited to, institutional trustees, investment advisors, investment managers and third-party administrators ("qualified financial institutions"). Such qualified financial institutions shall oversee the administration of the 457 Plan and the investment of assets in compliance with the 457 Document and the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended, from time to time.~~

~~H. If the Deferred Compensation Board delegates and appoints a qualified financial institution to oversee the administration of the 457 Plan and the investment of assets, then except as otherwise provided by applicable law, the Deferred Compensation Board shall have no liability:~~

~~1. for the acts or omissions of the qualified financial institution;~~

~~2. for following the investment directions of a qualified financial institution;~~

~~3. for failing to act in the absence of qualified financial institution direction; or~~

~~4. for any diminution in the value of the 457 Plan as a result of following the direction of the qualified financial institution.~~

~~I. Even if the Deferred Compensation Board delegates some or all of their custodial responsibility to manage the 457 Plan to another party or parties, they still shall comply with their the duties as set forth in the 457 Document and the Connecticut Uniform Prudent Investor Act, Conn. Gen. Stats. §§ 45a-541 through 45a-541l, as amended, from time to time.~~

~~J. The Deferred Compensation Board shall have the following additional duties and responsibilities:~~

~~1. establishing investment options/policies available to participants;~~

~~2. providing the plan information and documentation to participants;~~

~~3. organizing and assisting participants with regular meetings concerning the plan;~~

~~4. maintaining an investment advisory committee to act as a liaison for the participants;~~

~~5. identifying investment options within each asset class that it deems appropriate and prudent;~~

~~6. monitoring the investment results by means of regular review and analysis;~~

~~7. monitoring plan expenses, fees and costs;~~

~~8. retaining service providers to assist in the functioning of the plan and ensuring a comprehensive participant communication program to assist the participants in making informed decisions about investment contributions and choices;~~

~~9. hiring service providers and evaluating the success of those providers;~~

~~10. hiring qualified financial institutions to oversee the administration of the plan and the investments, monitoring these qualified financial institutions and evaluating these qualified financial institutions;~~

~~11. maintaining records for all employee accounts;~~

~~12. establishing individual accounts for employees; and~~

~~13. maintaining individual accounts for employees.~~

~~K.~~E. ~~The Deferred Compensation Board shall have the authority to delegate some or all of the duties and responsibilities identified in Section ___-7(I) to other parties.~~

§ ___-78. Indemnification of Deferred Compensation Board; Hold Harmless.

No member of the Deferred Compensation Board, nor any other person involved in the administration of the 457 Plan shall be liable to any person on account of any act or omission in good faith in performing their respective duties under the terms of the 457 Plan. To the extent permitted by law, except in matters involving criminal liability, negligence, intentional or willful misconduct, the City shall indemnify and hold harmless the Deferred Compensation Board from any and all liability and expenses, including counsel fees, reasonably incurred in any action, suit, or proceeding to which he/she is or may be a party by reason of being or having been a member, delegate or appointee of the Deferred Compensation Board. If the City purchases insurance to cover claims of a nature described above, then there shall be no right of indemnification except to the extent of any deductible amount under the insurance coverage or to the extent of the amount the claims exceed the insured amount.

§ ___- 8. Conflict of Interest.

If any board member has a direct or indirect business relationship with a vendor or service provider, he or she must disclose it to the board. Such a business relationship can include an ownership interest, self-employment with the vendor or service provider or employment by a board member's immediate family. That board member shall recuse himself from the decisions of the board to use that vendor or service provider and it will be noted in the minutes of the meeting. No board member shall unduly profit from his or her association with any vendor or service. At the beginning of each calendar year, any board member must disclose any such interest in writing to the Chairperson of the board.