

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MINNESOTA**

Armando Vargas and
Guillermina Sandoval Robles,

Plaintiffs,

**COMPLAINT AND DEMAND FOR JURY
TRIAL**

v.

Swagelok Company, a foreign corporation,

Defendant.

Plaintiffs Armando Vargas and Guillermina Sandoval Robles, for their Complaint against Defendant Swagelok Company (hereinafter “Swagelok”), hereby respectfully allege as follows:

1. This case arises out of an explosion that occurred on January 11, 2017, at a truck manufacturing facility in Dodge Center, Minnesota, where Plaintiff Armando Vargas was employed. Mr. Vargas was concussed, suffered smoke inhalation and other physical injuries, as well as suffering debilitating Post Traumatic Stress Disorder (PTSD) as a result of an explosion caused by the failure of a component part of a truck’s compressed natural gas (CNG) system, resulting in the escape of natural gas.

2. The fugitive gas that caused the explosion was the result of a defective and unreasonably dangerous hose assembly in the CNG system of a truck to which the hose assembly was attached. Defendant Swagelok failed to properly design, manufacture, test and inspect the hose assembly, which caused the hose to separate from its fitting and allowed fugitive gas to escape and, as a result, is strictly liable for all harms and losses suffered by the Plaintiffs.

3. Swagelok’s fundamental and inexcusable fault implicates systemic failures in manufacturing, design, training, quality control, inspection and testing.

4. As a result of the January 11, 2017, explosion, Armando Vargas suffered injuries resulting in medical care, loss of income, and significant emotional distress.

PARTIES AND JURISDICTION

5. At all relevant times herein, Plaintiff Armando Vargas is married to Guillermina Sandoval Robles and is a United States citizen and resident of the State of Minnesota, with a principal residence in Stewartville, Minnesota.

6. At all relevant times herein, Defendant Swagelok was a corporation organized and existing under the laws of the State of Ohio, with its principal place of business in the City of Solon, County of Cuyahoga, State of Ohio. Swagelok is one of America's largest privately held companies, with annual revenue in excess of \$2 billion.

7. Defendant Swagelok is engaged in the business of designing, manufacturing, assembling, marketing, distributing and/or selling parts that are used throughout the United States, including the hose assembly involved in the January 11, 2017, explosion. Swagelok claims that it stocks "about 10,500 standard parts" at "225 locations worldwide."

8. The United States District Court for the District of Minnesota has personal jurisdiction over Defendant Swagelok, which transacts business in the State of Minnesota and is registered with the Office of the Minnesota Secretary of State.

9. Jurisdiction in this matter is based on diversity of citizenship pursuant to 28 U.S.C. § 1332 and the amount in controversy, exclusive of interest and costs, is greatly in excess of \$75,000.

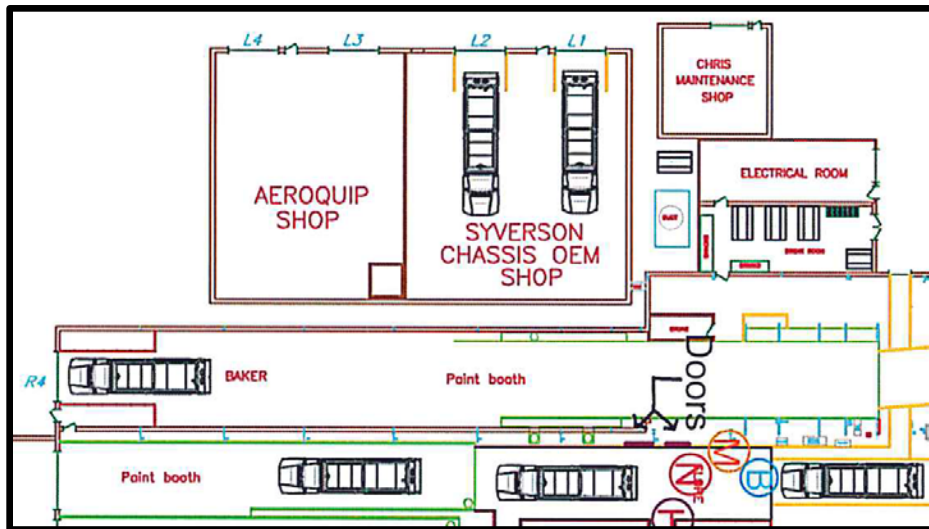
10. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(b) because a substantial part of the events or omissions giving rise to the claims asserted herein occurred in this district.

THE EXPLOSION OF JANUARY 11, 2017

11. On the morning of January 11, 2017, Plaintiff Armando Vargas was working within the course and scope of his employment at McNeilus Truck and Manufacturing, Inc. ("McNeilus"), at a facility located at 524 County Road 34 East in Dodge Center, Minnesota.

12. McNeilus is in the business of manufacturing and assembling CNG-powered refuse trucks and, upon information and belief, has done so thousands of times using the same processes and systems it utilized in this case, with no prior failures or explosions.

13. The location within the McNeilus facility where the January 11, 2017, explosion occurred - identified as line 6 - included three separate areas where CNG-powered refuse trucks being assembled progress from east to west. As shown in the diagram below, trucks under assembly move from a paint and touch-up booth to a heated baking room and then to a showroom. The explosion on January 11, 2017, occurred in paint booth 6 (marked as R4 below).



14. Plaintiff Armando Vargas was a painter at McNeilus, and had worked there for approximately four years prior to the explosion.

15. On January 11, 2017, Mr. Vargas was on the job early in the morning and had been asked to work on a vehicle in line 5. Shortly thereafter, while Mr. Vargas was in the area of line 5, a massive explosion and fireball shook the building, engulfing his co-workers, Eemou See and Anthony Putratz in flame. Smoke quickly filled the building, getting in Mr. Vargas' lungs and eyes.

16. According to the State Fire Marshal's report:

The explosion disrupted approximately 6 large overhead doors, blew out part of the side wall of the baking room, burned and or blew around foam type filters on

various paint booth air exchange systems, scorched and burned random areas of the ceiling and miscellaneous tools and contents nearby, dislodged part of the sprinkler system, set off 9 sprinkler heads, and also was also responsible for the injuries to six employees.

17. The force of the explosion is evident in the surveillance video from inside the building:



18. This portion of the surveillance video shows how quickly and completely the building filled with smoke following the explosion:



19. This portion of the surveillance video shows the tragic effect of the Defendant's hose failure, and giving a glimpse to the horrific scene experienced by Mr. Vargas: Ms. See, engulfed in flames, running to escape the building:



20. This portion of the surveillance video shows the tragic effect of the Defendant's hose failure, and giving a glimpse to the horrific scene experienced by Mr. Vargas: Mr. Putratz running to escape the building, his shirt and gloves burned off and his protective hat melted to his head:



THE CNG-POWERED TRUCK AND COMPONENTS

21. The CNG-powered refuse truck involved in the explosion (similar to the one shown below, utilizing a rear-loading system to lift trash into the vehicle) was being assembled by McNeilus for Waste Management, a national disposal and recycling company.



22. CNG-powered trucks do not have traditional gasoline engines, but instead run on compressed natural gas stored in pressurized cylinders atop the vehicle (in the area under the cowling marked by the blue arrow in the above photo). The CNG fuel system transfers the high-pressure natural gas from the fuel tanks to the engine.

23. The CNG-powered refuse truck involved in the explosion on January 11, 2017, had four natural gas cylinders mounted on the top rear of the vehicle, connected via a manifold, with a high-pressure CNG hose extending from the manifold to the front of the vehicle, where the pressure is regulated and introduced into the engine fuel management system.

24. The CNG-powered refuse trucks assembled at the McNeilus facility use components manufactured by other companies. In this case, the CNG module installed on the subject truck was supplied by Agility Fuel Systems ("Agility"). Agility's components were comprised of sub-assemblies, which included CNG hoses and fittings facilitating movement of the

compressed natural gas from the high pressure in the CNG storage tanks on top of the truck to the lower operating pressure required for the truck engine.

25. Defendant Swagelok designed and manufactured the CNG hoses and fittings on the subject truck. Swagelok produces and sells a variety of application-specific hose assemblies, including those shown below used in CNG systems.



26. Upon information and belief, the black Swagelok hose depicted above is the same type of hose that was involved in the January 11, 2017, explosion. Defendant Swagelok also manufactures and sells the fittings that are attached to the hoses by Swagelok personnel and which are sold as integrated hose assemblies to be connected to other components in the truck's CNG system.

27. As indicated in the report from the Dodge County Sheriff's office regarding the January 11, 2017, explosion, it was noted that "one particular hose has come unfastened from the CNG system" on the subject refuse truck, with the report further describing that "the hose appears to have pulled out of the factory crimped connection."

28. The image below depicts the fitting manufactured by Swagelok which attached to the hose that separated from the subject truck's CNG module on January 11, 2017, resulting in the release of pressurized natural gas that caused the explosion.



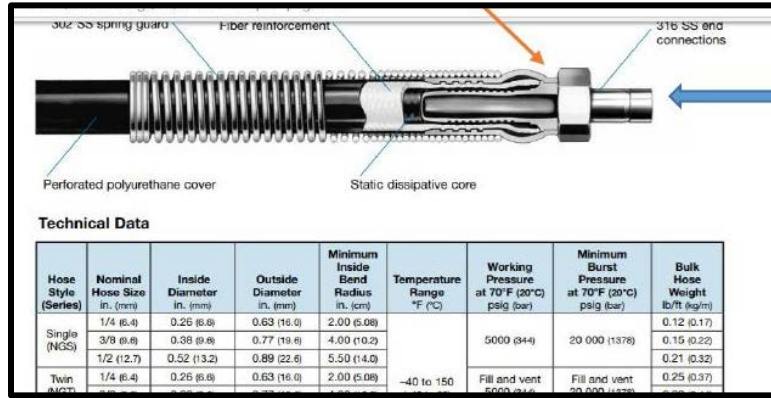
29. The image below shows the interior of the Swagelok fitting (viewed from the vantage point of the right side of the above-pictured fitting) involved in the explosion.



30. The process by which the Swagelok hose is designed to be mated to the fitting involves fully inserting the hose into the space between the inner (smaller diameter) barb and the outer (larger diameter) collar and then compressing the outer metal collar against it. Circumferential rings on the inner barbs within the fitting engage with the hose after compression of the outer collar in order to create a leak-proof fitting able to withstand the pressure rating for the hose. A more technical definition of this process is as follows:

A fitting attachment method utilizing a number of fingers or dies mounted in a radial configuration. The dies close perpendicular to the hose and fitting axis, compressing the collar, ferrule, or sleeve around the hose.

31. The image below, from Swagelok marketing materials, shows a cross section of a properly seated hose-fitting connection (note that the hose is flush with the end connection of the fitting, as shown by the orange arrow):



32. The failure mode leading to the January 11, 2017, explosion can be summarized as follows: for the joining process to work (i.e., to create a leak-proof seal able to withstand the pressure for which the hose is rated and which the CNG system demands), the Swagelok hose must be inserted all the way into the fitting before the mechanical pressure of the compression process is applied. If the hose is not fully inserted, circumferential rings distal to the hose insertion depth are unable to engage with the hose, resulting in a partial connection which is unable to withstand the system's operating requirements.

33. Swagelok's failure to ensure there was a properly-seated hose-fitting connection in the hose assembly caused the sudden, catastrophic separation of the hose from the fitting on January 11, 2017, resulting in the release of highly pressurized gas into the confined space where the subject refuse truck was located.

34. The image below of the subject refuse truck taken after the January 11, 2017, explosion shows the remnants of this failure mode: the hose end identified by the left-most orange arrow blew off the fitting identified by the right most arrow:



35. The above view shows the truck with the cowling cover removed; the image below shows the hose separation before removal of the cowling cover:



36. Close-ups of the hose and fitting ends can be seen in the photographs below. Technical analysis confirmed the lack of engagement of the hose assembly due to Defendant Swagelok's failure to fully engage and seat the hose within the fitting prior to compression:



37. As shown in the above photographs taken after the explosion, the “failed” end of the hose reveals a complete dislodgement of the hose from the crimp connection of the metallic fitting end (interior view of the hose end, at left; note the only two circumferential ring indentations from the proximal end of the barb tip).

38. This failure mode was so evident that it was noted by the state fire marshal at the time of the initial investigation, long before consulting experts confirmed it:

I do not know anything about the CNG system at this time, but it appears that the hose has become undone and may have released some of the natural gas product into the room. If the hose is pulled towards the CNG unit and angled towards the

burn patterns on the top and rear of the cover of the CNG unit-the heat and or fire could have come from the hose if it was for some reason angled in this direction.

39. The failure of the Swagelok hose assembly on January 11, 2017, stands in sharp contrast to the claims and guarantees Swagelok makes about its products. Among other representations, Swagelok claims in a promotional video that technicians “inspect each end connection” while “every hose is pressure tested with water to assure proper assembly and performance” and that “vigorous inspection and 100% testing ensures receipt of a high quality and reliable hose.” (<https://youtu.be/XRqYRd2FE8c?t=124>)

40. In fact, if Swagelok actually did what it claimed to do, the failure to properly seat the hose would have been easily detected and would have prevented the January 11, 2017, explosion and the catastrophic injuries suffered by Armando Vargas. Among other reasons, a properly assembled hose has a simple marking – which should be made before the hose is inserted on and into the fitting – showing the proper insertion depth.



41. In the photograph above of an exemplar Swagelok hose assembly, the green marking on the fabrication just outside the metal fitting was made to ensure that the hose was fully inserted into the coupling prior to compression of the metal coupling onto the hose. The Swagelok hose assembly which failed on January 11, 2017, lacked such a marking to ensure proper insertion depth. As a result, the subject hose was not fully inserted into the metal fitting and there was not enough clamping length to securely connect the hose to the fitting.

ARMANDO VARGAS PRIOR TO JANUARY 11, 2017

42. At the time of the January 11, 2017, explosion, Armando Vargas was 40 years old and had moved to southern Minnesota 20 years ago. Mr. Vargas was born in Mexico City, Mexico, and became an American Citizen in 2008.

43. In 1978, he married Guillermina Sandoval Robles, and they have been married ever since.

44. In 2012, Armando Vargas began working at McNeilus as a painter, often working closed to 60 hours per week.

45. Armando Vargas was an active and healthy man who enjoyed spending time with his family, traveling, hunting, and his work at McNeilus.

DAMAGES

46. As a direct and proximate result of the January 11, 2017, explosion, Armando Vargas sustained physical and emotional injuries, which have permanently scarred and impaired his mind and body, causing him to endure pain, suffering and other damages and pecuniary losses, as outlined herein.

47. Among other items of damages suffered by Armando Vargas, he endured:

- a. significant smoke and chemical inhalation requiring hospitalization and decontamination;
- b. bilateral ocular pruritis and conjunctivitis; and
- c. has suffered headaches, sleep disturbance and acute stress disorder from the horror of the experience.

48. The medical and related expenses Mr. Vargas has sustained are in excess of \$23,000, and his damages will continue for the remainder of his life, as he will require ongoing medical care and therapy.

49. Mr. Vargas has been unable to return to full-time work, and will sustain significant loss of earning capacity over the remainder of his life.

50. In addition to other physical injuries, Mr. Vargas has experienced virtually all of the severe psychological sequelae associated with those conditions, including intrusive thoughts, hopelessness, anxiety, nightmares and persistent depression. Mr. Vargas's trauma and emotional distress is continuing in nature, has been manifested by physical symptomology, has impacted the lives of Mr. Vargas and his loved ones, and has otherwise been debilitating, humiliating, and severely traumatizing.

51. As a direct and proximate result of Plaintiff Armando Vargas's injuries from the explosion, he has sustained the following items of damages, among others, for which Plaintiffs are entitled to compensation:

- a. Past, present and future hospital, medical, pharmacy and rehabilitation care and treatment expenses.
- b. Past, present and future permanent disability.
- c. Past, present and future physical pain and suffering and other mental and psychological injuries.
- d. Past, present and future loss of enjoyment of life.
- e. Past, present and future loss of earnings and earning capacity.
- f. Past, present and future loss of economic opportunity.
- g. Other economic or out-of-pocket losses to be determined.

52. Plaintiff Guillermina Sandoval Robles has also suffered a loss of services, companionship, society and consortium, by reason of the injuries and damages sustained by her husband, Plaintiff Armando Vargas.

53. As a result, Plaintiffs have sustained losses, injuries and damages in an amount vastly in excess of Seventy-Five Thousand Dollars (\$75,000.00).

JURY TRIAL DEMAND

54. Plaintiffs demand a jury trial as to all issues of fact herein.

COUNT ONE
NEGLIGENCE – DESIGN, MANUFACTURE AND WARNINGS

55. Plaintiffs re-allege and incorporate herein by reference the allegations contained in the preceding Paragraphs of this Complaint as if set forth herein in their entirety.

56. Defendant Swagelok is involved in the business of designing, manufacturing, distributing, testing and inspecting hose assemblies utilized in CNG systems, including but not limited to, the hose assembly involved in the January 11, 2017 explosion.

57. Defendant Swagelok knew, or in the exercise of ordinary and reasonable care should have known, of the significant dangers posed by a defective and improperly-seated hose assembly utilized in a CNG system, including that a separation of the hose in such a system could result in catastrophic consequences.

58. Defendant Swagelok knew, or in the exercise of ordinary and reasonable care should have known, that the subject hose assembly was defective and unreasonably dangerous for the use and purpose for which it was intended and lacked adequate warnings.

59. At all times material herein, Defendant Swagelok owed certain duties to persons who could foreseeably be harmed by a defective and improperly-seated hose assembly utilized in a CNG system, including the extreme risk of harm resulting from a separation of the hose.

60. At all times material herein, Defendant Swagelok had a duty to use reasonable care in the design, manufacture, testing and inspection of the subject hose assembly, including having safeguards in place to prevent the risk of separation of the hose, and had a duty to provide reasonably adequate warnings and instructions to all those who could foreseeably be impacted by a defective and improperly-seated hose assembly utilized in a CNG system, including warnings regarding the risk of separation of the hose.

61. Notwithstanding such duties and obligations, Defendant Swagelok failed to exercise reasonable care in the following ways, among others:

- a. Failing to follow recommendations, requirements, standards, guidelines and regulations and/or recommended practices

regarding proper selection, assembly, testing and inspection of the subject hose assembly;

- b. Failing to properly engineer and manufacture the hose assembly;
- c. Failing to follow recommendations, requirements, standards, guidelines and regulations and/or recommended practices regarding appropriate warnings, instructions and safety precautions to be provided to purchasers, installers and end users of such hose assemblies
- d. Failing to use proper components in the hose assembly to ensure that the hose could not separate from the fitting under the conditions which existed on January 11, 2017;
- e. Failing to reasonably warn end-users of the hose assembly about the extreme danger resulting from a hose separation;
- f. Failing to design the hose assembly in such a manner to ensure that the hose could not separate from the fitting under the conditions which existed on January 11, 2017;
- g. Designing, manufacturing, distributing, selling, and/or supplying a product that was unreasonably dangerous;
- h. Designing, manufacturing, distributing, selling, and/or supplying a product which failed to contain elements necessary to make the hose assembly safe for its intended use and/or contained elements which made the hose assembly unsafe for its intended use;
- i. Designing, manufacturing, distributing, selling, and/or supplying a product that posed an unreasonable risk that fugitive gas could escape;
- j. Failing to implement adequate and necessary policies concerning the inspection and testing of hose assemblies;
- k. Failing to adequately warn of the risk of separation of the hose assembly and the risk of escaping fugitive gas;
- l. Failing to properly train employees and personnel involved in the manufacture, design, testing and inspection of the hose assembly;
- m. Failing to utilize proper testing and inspection procedures related to the hose assembly before placing it in the stream of commerce.

62. As a direct and proximate result of Defendant Swagelok's carelessness, negligence and other liability-producing acts and omissions as outlined herein, Plaintiff Armando Vargas suffered serious, severe and disabling injuries including, but not limited to, concussion,

smoke inhalation, psychiatric and emotional injuries, as well as other injuries, the full extent of which are not yet known, some or all of which are permanent in nature.

63. As a direct and proximate result of Defendant Swagelok's carelessness, negligence and other liability-producing acts and omissions, Plaintiff Armando Vargas has in the past required - and will in the future require - medical treatment and care, and has in the past and will in the future incur the cost of medicines, medical care, hospitalizations, treatment, future operations, testing, rehabilitation and other attempts to alleviate and/or cure his condition.

64. As a direct and proximate result of Defendant Swagelok's carelessness, negligence and other liability-producing acts and omissions, Plaintiff Armando Vargas has in the past and will in the future suffer pain, scarring, disfigurement, loss of independence, mental anguish, humiliation, embarrassment, fear, loss of well-being, inability to enjoy the normal pleasures of life, and restrictions on his ability to engage in normal activities and pleasures of life, as well as other intangible losses.

65. As a direct and proximate result of Defendant Swagelok's carelessness, negligence and other liability-producing acts and omissions, Plaintiff Armando Vargas has been prevented and will be prevented in the future from performing his usual duties, activities and occupations, has suffered a loss of earnings and will suffer a future loss of earning capacity.

66. As a direct and proximate result of Defendant Swagelok's carelessness, negligence and other liability-producing acts and omissions, Plaintiff Guillermina Sandoval Robles has suffered a loss of services, companionship, society and consortium, by reason of the injuries and damages sustained by her husband, Plaintiff Armando Vargas.

67. As a result, Plaintiffs have sustained losses, injuries and damages in an amount vastly in excess of Seventy-Five Thousand Dollars (\$75,000.00).

COUNT TWO
STRICT LIABILITY – DESIGN, MANUFACTURE AND WARNING

68. Plaintiffs re-allege and incorporate herein by reference the allegations contained in the preceding Paragraphs of this Complaint as if set forth herein in their entirety.

69. At all material times herein, Defendant Swagelok was engaged in the business of designing, manufacturing, testing, inspecting, distributing, supplying and/or selling parts to be utilized in CNG systems, including the hose assembly which caused the explosion on January 11, 2017.

70. The hose assembly involved in the January 11, 2017, explosion was designed, manufactured, distributed, tested, inspected, sold, supplied and/or placed in the general stream of commerce by Defendant Swagelok.

71. The subject hose assembly was expected to and did reach users and consumers without substantial change in the condition in which it was designed, manufactured, distributed, tested, inspected, sold and/or supplied.

72. At all material times herein, the subject hose assembly was used as it was intended to be used or in a manner that Defendant Swagelok could have reasonably anticipated.

73. The subject hose assembly was designed, manufactured, sold and/or supplied by Defendant Swagelok in a defective and unreasonably dangerous condition and with inadequate warnings, as detailed in the foregoing paragraphs of this Complaint.

74. The defects in the subject hose assembly existed at the time it left Swagelok's possession or control and were such that the hose assembly was defective, unreasonably dangerous and unsuitable for use in the CNG system of the refuse truck involved in the January 11, 2017, explosion.

75. The hose assembly designed, manufactured, distributed, tested, inspected, sold and/or supplied by Defendant Swagelok was defective due to inadequate warnings or instructions because Swagelok knew or should have known through testing, scientific knowledge or otherwise

that the subject hose assembly created a high risk of bodily injury and serious harm to all those who could foreseeably be impacted by separation of the hose from the fitting.

76. The hose assembly designed, manufactured, distributed, tested, inspected, sold and/or supplied by Defendant Swagelok was defective and unreasonably dangerous in design, manufacture or formulation in that, when it left the hands of Defendant Swagelok, the hose assembly had not been adequately inspected or tested and posed a risk of serious bodily injury from a resulting failure or of the hose from the fitting.

77. As a direct and proximate result of the defective and unreasonably dangerous hose assembly designed, manufactured, distributed, tested, inspected, sold and/or supplied by Defendant Swagelok, which directly and proximately caused a massive explosion, Plaintiff Armando Vargas was severely injured in the January 11, 2017, explosion and Plaintiffs have sustained significant injuries and damages which are permanent and continuing.

78. The injuries sustained by Plaintiff Armando Vargas as a result of the separation of the hose and the escape of fugitive gas leading to an explosion could and should have been reasonably foreseen by Swagelok.

79. Defendant Swagelok is strictly liable for the injuries and damages suffered by Plaintiffs, as described in the foregoing paragraphs.

COUNT THREE BREACH OF WARRANTY

80. Plaintiffs re-allege and incorporate herein by reference the allegations contained in the preceding Paragraphs of this Complaint as if set forth herein in their entirety.

81. As a manufacturer and seller of the hose assembly which caused the explosion on January 11, 2017, Defendant Swagelok expressly and impliedly warranted that the hose assembly was safe to use and was reasonably fit for the general uses and purposes for which it was sold, that it was properly tested and inspected and that it was free of any defects that would create an unreasonable risk of injury to all those who could foreseeably be impacted by the hose

assembly and that Defendant Swagelok had fully and properly warned and/or educated potential users of the risks posed by the hose assembly, including of the separation of the hose from the fitting.

82. Upon information and belief, prior to January 11, 2017, Defendant Swagelok made express or implied representations regarding the safety of its products and its practices, including that the subject hose assembly was safe for the use for which it was intended.

83. Defendant Swagelok breached these implied and/or express warranties in that the Swagelok hose assembly which was part of the CNG system on the refuse truck involved in the explosion of January 11, 2017, was not safe or fit for its intended use, was improperly tested or inspected and was otherwise defective and unreasonably dangerous.

84. Plaintiff Armando Vargas was a third-party beneficiary to the express or implied warranties Defendant Swagelok made to others.

85. Plaintiff and others to whom Swagelok made express or implied warranties, relied on the skill and judgment of Defendant Swagelok with regard to the manufacture, design, inspection and testing of the subject hose assembly utilized in the refuse truck's CNG system and relied on the express or implied warranties made by Defendant Swagelok.

86. As a direct and proximate result of Defendant Swagelok's breaches of express or implied warranties, Plaintiff Armando Vargas was seriously injured on January 11, 2017, and Plaintiffs suffered the injuries and damages described in the foregoing paragraphs.

WHEREFORE, Plaintiffs pray for judgment against Defendant Swagelok as follows:

- A. As to all counts, for judgment against Defendant Swagelok in amounts to be proven at trial, such amounts in excess of the jurisdictional minimum limits of this court, so as to constitute just, reasonable and adequate compensation of Plaintiffs for all general, special, incidental and consequential damages incurred, or to be incurred, by Plaintiffs as the direct and proximate result of the acts and omissions of Defendant;
- B. For the opportunity to amend or modify the provisions of this Complaint as necessary or appropriate after additional or further discovery is completed in this matter, and after all appropriate parties have been served;

- C. For pre-judgment and post-judgment interest as allowed by law;
- D. For attorneys' fees, expenses and costs of this action, as allowed by law;
and
- E. For such other and further relief as the Court deems just and proper.

Dated: November 28, 2017

PATTERSON DAHLBERG

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