UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

UNITED STATES OF AMERICA, et al.,
Plaintiffs

vs

BOARD OF HAMILTON COUNTY COMMISSIONERS, et al.,
Defendants

Case No. 1:02-cv-107
Spiegel, J.
Litkovitz, M.J.

ORDER RE: REQUEST FOR REVIEW BY WARDELL HILL

This matter is before the Court on the Request for Review of the denial of a Sewer Back Up ("SBU") claim by Wardell Hill (Doc. 626), the Metropolitan Sewer District of Greater Cincinnati's response thereto (Doc. 637), and the affidavit of Mr. Hill (Doc. 672). On December 12, 2013 and January 30, 2014, the Court held hearings on Mr. Hill's request for review at which Mr. and Mrs. Hill, Art Hunkele, and Tom Fronk testified. Mr. Hill seeks compensatory damages from the Metropolitan Sewer District of Greater Cincinnati ("MSD") for basement flooding on July 10, 2013.

I. Background

Mr. Hill is the owner of the property at 1046 Lockman Avenue, Cincinnati, Ohio. Mr. Hill's basement flooded following a rain event on July 10, 2013. Mr. Hill submitted a claim to MSD under the SBU claims program requesting $26,000.00 in damages for property loss or, in the alternative, that MSD purchase his property. MSD denied Mr. Hill's claim because it determined that the basement flooding incident on July 10, 2013 at 1046 Lockman Avenue was not attributable to the incapacity of MSD's sewer system or MSD's negligence in the system's upkeep or maintenance. Mr. Hill then filed his request for review of MSD's decision in this Court.

Mr. Hill's request for review is filed under the Sewer Back Up[1] program (formerly known as the Water-in-Basement Claims Process Plan) (Doc. 131, Consent Decree, Exhibit 8). The Plan states in relevant part:

> Subject to the requirements of this Plan, occupants who incur damages as a result of the backup of wastewater into buildings due to inadequate capacity in MSD's Sewer System (both the combined and the sanitary portions) can recover those damages. This plan also provides a means for occupants to recover damages arising from backups that are the result of MSD's negligent maintenance, destruction, operation or upkeep of the Sewer System. The Claims Process is not intended to address water in buildings caused by overland flooding not emanating from MSD's Sewer Systems or caused by blockages in occupants' own lateral sewer lines.

(Doc. 131, Consent Decree, Exhibit 8 at 1). In determining the cause of SBU, MSD must exercise its good faith reasonable engineering judgment and consider the following non-exclusive factors: amount of precipitation, property SBU history, condition of the sewer system in the neighborhood, results of a visual inspection of the neighborhood to look for signs of overland flooding, neighborhood SBU history, capacity of nearby public sewer lines, and topography. (Doc. 131, Consent Decree, Exhibit 8 at 2). Damages arising from wastewater backups into buildings for which MSD is responsible are limited to documented real and personal property. *Id.* Homeowners who are dissatisfied with MSD's disposition of a claim under the SBU program may request review of the decision by the Magistrate Judge, whose decision is binding and not subject to any further judicial review. (Docs. 154, 190).

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[1]The "Water-In-Basement" program has been renamed the "Sewer Back Up" program to more accurately reflect MSD's responsibility for sewage backups caused by inadequate capacity in MSD's sewer system. *See* Doc. 452 at 4; Doc. 454 at 16.

II. Evidence presented

A. Mr. Hill's evidence

Mr. Hill testified that he has experienced flooding problems on his property for 12 years. In 2005 MSD installed a backflow prevention device (a wastewater pump) in Mr. Hill's basement to protect the property from sewer backups. The so-called Sewer Backup Prevention Program (SBUPP)[2] device was installed by MSD at its own expense and includes a whole house grinder pump[3] and check valve[4]. Mr. Hill states a representative from Winelco, the company MSD hired to install the backflow prevention device, told him in 2009 that the device may not prevent waste water from entering a property when (1) the device is not in proper working order, or (2) the check valve (the part of the pump designed to prevent backflow) becomes stuck in the "open" position.

On July 10, 2013, Mr. Hill heard rattling in the SBUPP pump's pipes, went down to his basement, observed lights flickering, and discovered water covering the floor of his basement. He described seeing water bubbling up in the area of the floor drain. He immediately called MSD and was advised MSD would dispatch a service crew. A MSD service crew came out on

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[2]The Water in the Basement Prevention Program Plan is a component of the Consent Decree designed to preclude the occurrence of building backups. Eligible properties which have experienced multiple backups of wastewater due to inadequate capacity in MSD's Sewer System can receive at no cost the installation of systems or devices to prevent the backup of wastewater in the future. (Doc. 131, Consent Decree, Exhibit 6).

[3]These "pumping systems" are installed to break the direct connection between a property's private sewer line and the public mainline sewer. Instead, wastewater from the property is redirected to a holding tank and is then pumped into the mainline sewer by means of a motorized pump. (Doc. 131, Consent Decree, Exhibit 6 at 4).

[4]These so-called "backflow preventers" are mechanical devices installed in the private building plumbing or the private sewer "lateral" (a pipe that runs from a building to the public sewer pipe). Backflow preventers allow wastewater to flow away from the property and block wastewater from flowing into the property and backing up into the building. (Doc. 131, Consent Decree, Exhibit 7 at 4).

July 12 to investigate.[5] The crew performed a routine inspection and told Mr. Hill they would contact Tom Fronk, an Engineering Technical Supervisor for MSD, to arrange for a crew to clean his basement. They also advised Mr. Hill that MSD's contractor, Winelco, would be out to inspect the pump. Mr. Hill avers that the service crew advised him they found some debris in the main sewer lines and that Mr. Hill's property would be recommended for clean up. (Doc. 672, Hill Affidavit).

Mr. Hill states that on July 13, 2013, a Winelco service technician came to his residence to inspect the SBUPP pump. He informed the technician that he heard the pump alarm sounding and the pipes rattling, followed by a clicking noise. The technician inspected the pump and told Mr. Hill the pump could have become "air locked," which can cause a sewage backup. The technician advised Mr. Hill to unplug, then re-plug, the power source to the pump to get it to cycle properly. The Wineclo technician also advised Mr. Hill he would inform Tom Fronk of MSD of the problem. Mr. Fronk later advised Mr. Hill that MSD would not be able to clean up the property because MSD believed it was not responsible for the basement flooding.

Mr. Hill states that other properties on Lockman Avenue experienced flooding problems on July 10, 2013. He presented letters from two homeowners verifying they had basement flooding on July 10, 2013. (Doc. 626 at 16, 17).

Mr. Hill called Dick Scott Plumbing to investigate his basement flooding. Mr. Hill states that Dick Scott Plumbing rodded the building lateral and found no obstruction. Mr. Hill states the plumber advised him that the pump was not effective and needed to be re-engineered to be more effective in keeping the water out. (Doc. 626 at 6). The job invoice from Dick Scott

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[5]MSD's records show that Mr. Hill's call was received on July 11, 2013. (Doc. 637, Exh. A).

Plumbing includes a notation about rodding the sewer line, but nothing about the effectiveness or capacity of the pumping device. (Doc. 681, Pl. Exh. 1).

Mr. Hill contacted Everdry Water Proofing in November 2013 to investigate a solution to the water problems in his basement. Mr. Hill states he was told by Everdry the pump needed to be re-engineered. However, the documents from Everdry do not say anything about the effectiveness of the pump. (Doc. 681, Pl. Exh. 2).

Mr. Hill retained the services of Art Hunkele, a professional engineer, to provide engineering advice about the periodic backup of his house sewer. In a letter dated December 11, 2013, Mr. Hunkele opined that the "unconventional sump pump" installed by MSD at Mr. Hill's home has "a fundamental flaw in that it replaces 'gravity sewage disposal' with mechanical/electrical equipment" and that during power outages the Hills are unable to utilize their plumbing fixtures. Mr. Hunkele also opined:

> Likewise during peak sewer flows, the pump cannot overcome the pressures in the sewer main. Furthermore the volume and pressure of the main sewer forces sewer debris 'backwards' relative to the intended sewer flow. This is very problematic in the 'bell and spigot' design of clay pipe which is utilized in your sewer line. PVC plastic pipe would be potentially immune to the problem but was not utilized until the 1970's while your home was constructed in the 1920's.
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> The fundamental cause of this backup problem is the fact that the public sewers in your area are combined storm and sanitary. Thus during high storm runoffs, the volume of water/sewage flow exceeds the capacity of the system. The neighboring hillside topography causes the lower inlets to be overwhelmed as evidenced by the 'manhole cover bolt down' in the main trunk line along the rear of your property. Your backup issues are fundamentally a result of MSD's inadequate sewer network.

(Doc. 682, Exh. 2).

Both Mr. and Mrs. Hill testified that they do not experience basement flooding with normal use of the basement plumbing fixtures or with moderate rainfall. They testified that their

basement floods only after very heavy rains that accompany severe storms.

B. MSD's evidence

MSD contends that it properly denied Mr. Hill's claim as subsequent investigations showed there was no surcharge from the public sewer into Mr. Hill's property and, in any event, the SBUPP device previously installed by MSD on Mr. Hill's property was in good working order. In accepting the Backflow Preventer and the Grinder Pump system, Mr. Hill signed a covenant with MSD that was also filed with the County Recorder. (Doc. 637, Exh. E). Mr. Hill agreed that MSD was not responsible for ensuring the utility costs and power supply to the grinder pump. *Id.* Mr. Hill agreed that he and his wife were solely responsible for the daily operation and maintenance of the grinder pump, and specifically released MSD from any SBU claims associated with its daily operation and use. *Id.* MSD argues that because power outages are unrelated to pump malfunctions, any issues resulting from the lack of power to the pump are the responsibility of Mr. Hill.

MSD presents evidence that the crew who responded to Mr. Hill's call on July 12, 2013, found no main line sewer trouble and that the grinder pump was operating correctly. The matter was referred to MSD Engineering Technical Supervisor Tom Fronk for further investigation. (Doc. 637, Exh. A).

On July 13, 2013, Winelco inspected the grinder pump installed at Mr. Hill's property as a follow-up to the July 10 incident. The Winelco technician who responded states that he found no alarm condition present upon his arrival and the water level in the pump basin was normal. (Doc. 683, Def. Exh. 2, Affidavit of Jonathan Singleton). Following a routine cycling test and a simulated flooding of the basin, both the pump and alarm were found to be in good working order.

The technician states that he spoke with Mr. Hill, who explained he had heard an alarm during a heavy rain event, heard some vibration in the pump piping, and then heard a click. Mr. Hill related to the technician that after the click, water began rising in the basement; upon inspection, Mr. Hill found the breaker to be tripped; Mr. Hill then turned the breaker back on; and the water began to recede after a couple of minutes. *Id.* The technician states he could not find anything wrong with the pump or anything to explain why the breaker had tripped. Prior to departing the Hill residence, the technician resecured the pump basin and ensured the alarm was in the normal position. The technician also states he did not access the breaker box at any time while at the property. *Id.*

MSD also submitted a report from Winelco's Service Manager, Tony Rutledge, about the July 13, 2013 inspection at Mr. Hill's residence. (Doc. 637, Exh. B). Winelco found both the alarm and pump were both operating properly at that time and there were no indications of mechanical failure or potential problems. *Id.* Winelco had no explanation for why the breaker would have tripped. While the Winelco service technician speculated that the weep hole could have become clogged and might therefore not have been moving water, upon inspection there was no indication of a clogged weep hole. Even assuming the weep hole had been clogged, however, Winelco concluded that this would not explain the tripped breaker. Mr. Rutledge stated that he suspected an infiltration problem in the building sewer/drain allowing water to come up through the floor when overwhelmed by a heavy rain event. *Id.*

MSD also presented evidence from subsequent inspections of the grinder pump which suggests that a loss of power to the pump – which is the responsibility of the homeowner – may have caused the grinder pump to cease operating. On August 31, 2013, Winelco responded to an

emergency call from Mr. Hill. The technician found no problems with the pump or associated wiring, but the pump was not operating at the time of arrival. When the Winelco technician asked to see the breaker box, Mr. Hill responded by reaching up to turn the power off and then back on. The pump then began operating as normal without explanation. (Doc. 637, Exh. C; Doc. 683, Def. Exh. 1). The technician then inspected the whole house breaker box and did not find any problems with the electrical wiring. *Id.* The technician could find no explanation for the loss of power to the pump. *Id.* On September 2, 2013, Winelco responded to another emergency call from Mr. Hill and found the water level in the pump basin was high, causing the alarm to sound. There was no activity in the pump, so the technician inspected the breaker box and found both the pump and alarm breakers in the "off" rather than "tripped" positions. The technician turned the breaker to the "on" position and the pump cycled properly. (Doc. 637, Exh. D; Doc. 683, Def. Exh. 4). The technician checked the pump through several cycles and found it to be working properly. He also checked the voltage and amperage and both were at normal levels. *Id.* There was no technical explanation for why the power to the pump had been shut off on both occasions.

On December 23, 2013, MSD investigated whether the basement plumbing fixtures and house downspouts were tied into the SBUPP pump. TV camera and dye testing showed that all of the basement plumbing fixtures were tied into the pump and that the pump had been installed as designed. (Doc. 682, Pl. Exh. 1). The testing also showed that all four of the house downspouts were not tied into the pump basin.[6] *Id.* Dye testing further revealed that water from the front downspouts was seeping in through a joint in the building sewer. *Id.*

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[6]At the first hearing, Mr. Hill testified that he believed the downspouts were tied into the pump basin, which would add more volume to and strain on the pumping system. The dye testing showed this was incorrect.

MSD also presented service report forms for three other properties on Lockman Avenue that showed no sewer surcharge on July 10, despite the reports of flooded basements. (Doc. 683, Def. Exs. 8, 9, 10).

On January 7, 2014, Winelco conducted routine annual maintenance on the grinder pump installed at Mr. Hill's residence. Testing showed that the pump and alarm were operating properly. (Doc. 683, Def. Exh. 3). Mr. Hill mentioned that the basement lighting in the pump area had not been working since Winelco had been out a few months prior and asked the technician to investigate. The technician discovered a burnt wire nut in the circuit breaker panel, he rewired it, and electricity was restored to the basement lighting. *Id.* The technician states that although he repaired the wiring for Mr. Hill, the electricity for the lighting is unrelated to the pump because the SBUPP pump is on an independent circuit.[7] *Id.*

C. Hearing testimony of Mr. Hunkele and Mr. Fronk

At the second hearing, Mr. Hunkele, the professional engineer hired by Mr. Hill, expounded on the letter he wrote for Mr. Hill. Mr. Hunkele testified that sewage from the upper floors and the basement were deposited in the SBUPP pump and that the pump was not preventing backups. He explained that the pump can be overwhelmed by backward forces which can bend a metal backflow preventer and render it inoperative. He also testified that a "check valve" was more robust, but he did not believe Mr. Hill's pump was equipped with a check valve. Mr. Hunkele testified that a family of Mr. Hill's size could not generate the volume of wastewater found in Mr. Hill's basement and he concluded that if the problem is not internal, a backup from

[7]Mr. Hill confirms he was told by the technician that each circuit has its own breaker. However, Mr. Hill also states the technician told him that the breakers shared a neutral bar which "could have arc[ed] out and tripped the alarm breaker" and "could have been the cause of the electrical issues." (Doc. 672, Hill Affidavit).

MSD's sewer system was the most likely cause of the basement flooding.

Mr. Hunkele further testified that Mr. Hill's building sewer lateral consisted of "bell and spigot" clay pipes. These pipes work as intended when there is no mainline sewer surcharge and water is flowing away from the house to the public sewer. However, when the water flows in the opposite direction – as when the public sewer surcharges – it causes problems because sewage and debris can get clogged in or seep through the joints of the pipes. Mr. Hunkele testified the joints of the bell and spigot clay pipes do not seal and the backward pressure from the surcharging public sewer can force water to seep from the joints, cracks, or other openings in the pipes and saturate the subsurface of the soil. This combination of sewer and rain water can then enter the basement through cracks and crevices in the basement floor or foundation. Mr. Hunkele testified that given the age of Mr. Hill's home, which was built in 1925, this is the most likely scenario to explain the backup of sewage and rainwater into the basement. He testified that any issue with the clay bell and spigot pipes could be remedied by replacing the clay pipes with PVC pipes.

In contrast to Mr. Hunkele's testimony, Mr. Fronk testified and presented a photograph showing that the SBUPP pump installed in Mr. Hill's basement was in fact equipped with a check valve. Mr. Fronk also testified that the elevations of the discharge pipe connected to the SBUPP pump and the two public sewer manholes that service Mr. Hill's residence are such that any surcharge from the public sewer would not come through the basement plumbing fixtures. The discharge pipe connected to the SBUPP pump is at a height of 864 feet above sea level. Any surcharge from the public sewer would have to reach this height before it could flow back into the pump basin. The manhole rims serving Mr. Hill's property are 3 feet and 8 feet lower than the discharge pipe. Because water seeks its own level, any sewer surcharge from MSD's sewer

system would necessarily be expelled first from the lower level manhole rims and not the higher level discharge pipe in the SBUPP pumping system.

Mr. Fronk also testified that the dye testing in December 2013 showed that the downspouts do not tie into the pump system, which ensures that the pump is not pumping rain water from the roof of Mr. Hill's house. The test did show dye feeding in through a joint in the building lateral, suggesting that any water flowing through the downspout would add to the saturation of the subsoil. He also confirmed that there was old piping underneath the house. Finally, Mr. Fronk testified that the affidavits of the three separate Winelco technicians who serviced the pump at Mr. Hill's residence showed that the SBUPP pump was operational and that electrical issues consistently coincided with the basement flooding and pump issues at Mr. Hill's residence.

Following Mr. Fronk's testimony, Mr. Hunkele clarified his earlier testimony and essentially agreed with Mr. Fronk that given the elevations of the discharge pipe in relation to the sewer manholes, he did not think the SBUPP pump was the issue. He testified that if he were going to perform an additional investigation as to the cause of the basement flooding, he would focus on the remaining clay tile pipe that was "active" in the basement and connected to the public sewer. He testified that during sewer surcharges the water and sewage in the clay pipes may be seeping into the subsurface soil and into the basement.

III. Resolution

Under the SBU program governed by the Consent Decree, homeowners who seek review of the denial of an SBU claim bear the burden of proof of showing that the backup of wastewater into their property was due to inadequate capacity in MSD's sewer system. (Doc. 131, Consent

Decree, Exhibit 8 at 1). Here, Mr. Hill has not shown that the wastewater backup into his basement was caused by inadequate capacity in MSD's sewer system.

Although Mr. Hunkele's December 2013 letter would support a finding that the SBUPP pump installed by MSD was inadequate to the task, the Court gives this opinion little weight. Mr. Hunkele stated that the SBUPP pump installed by MSD at Mr. Hill's home was flawed because it replaced gravity sewage disposal with mechanical equipment that was vulnerable to power outages and the pump cannot overcome the pressures in the sewer main. Yet, Mr. Hunkele's opinion is based, in part, on an incorrect assumption about the plumbing fixtures in Mr. Hill's residence. MSD presented evidence that the basement fixtures were the only plumbing fixtures tied into the SBUPP pump and that the plumbing fixtures from the first and second floors of the house remained gravity-based systems that continue to work in the absence of electrical power. MSD also presented evidence that Mr. Hill's SBUPP pump was equipped with a check valve, contrary to Mr. Hunkele's assumption that it was not. Therefore, the Court does not give Mr. Hunkele's letter much weight.

There is conflicting evidence on whether or not the public sewer surcharged on July 10, 2013 on Lockman Avenue. While MSD presented three service forms from other homes on Lockman Avenue indicating there was no surcharge of the mainline sewer on July 10, Mr. Fronk testified at the first hearing that there was a good possibility that the sewer surcharged on that date. In addition, MSD's service form for Mr. Hill's residence indicates the crew responding found "some debris" on the ladder rungs of the downstream sewer, suggesting a surcharge of the sewer.

Nevertheless, even assuming there was a surcharge of the public sewer, the preponderance

of the evidence shows the public sewer was not the cause of the flooding in Mr. Hill's basement. First, the evidence shows that the elevation of the discharge pipe connected to the SBUPP pump in Mr. Hill's basement is 3 feet above the upstream manhole and 8 feet above the downstream manhole on Lockman Avenue. This means that if there was a surcharge in the main public sewer line, both the downstream and upstream manholes would have necessarily surcharged before sewer water could reach the elevation of the discharge pipe in the pump and flow back down into the pump basin. Second, there is evidence that an electrical problem most likely caused the pump to cease operating and that the supply of power to the SBUPP pump is the responsibility of the homeowner. Third, the pump was equipped with a check valve that is intended to stop the backflow of sewage to the pump basin and there is no evidence that the check valve was damaged or did not operate properly on July 10, 2013. Fourth, there is evidence that the clay pipes that comprise Mr. Hill's building lateral, which he is responsible for maintaining[8], are old and designed in such a way that they may have contributed to the saturation of the subsurface soil under the basement by allowing water and sewage to seep through the basement floor through existing cracks or holes. Both Mr. Hunkele's testimony and the August 2013 report from Winelco support this conclusion. Therefore, there is insufficient evidence to establish that any flooding of Mr. Hill's basement was the result of a capacity-related problem with MSD's Sewer System for which MSD would be responsible.

The question left unanswered in this case is the actual cause of the basement flooding to Mr. Hill's basement. Whether the flooding of Mr. Hill's basement was caused by effluent from

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[8]Section 2008 of the MSD Rules and Regulations places the responsibility for maintaining and cleaning the building sewer lateral on the owner of the premises.

house usage which backed up from the pump basin because the pump was temporarily without power, faulty or porous pipes leading to and underneath his house, ground saturation from previous storms seeping through the floor and walls, or some other source is simply unknown. The Court is not unsympathetic to homeowners such as Mr. Hill who experience flooding issues such as those that occurred in this case. The Court appreciates Mr. Hill's frustration at being told by his plumber and restoration company that the backup was likely caused by the public sewer discharging and a faulty pump, only to be later advised that MSD is not responsible for the damage. Yet, this Court is bound by the terms of the Consent Decree in this matter, which places the burden of proof on the homeowner to show that a capacity-related public sewer problem was the cause of the damage to a property. The undersigned is responsible for ensuring that any costs for damages to an individual's private property that must be paid by MSD (and ultimately the rate payers of Hamilton County) under the Consent Decree are the result of the backup of wastewater onto the property due to inadequate capacity in MSD's Sewer System. Where, as here, the preponderance of the evidence does not establish that the damage to Mr. Hill's basement was caused by inadequate capacity in the MSD Sewer System, the Court is constrained to deny Mr. Hill's claim.

IT IS SO ORDERED.

Date: 3/27/14

Karen L. Litkovitz, Magistrate Judge
United States District Court