

Flushing

by Krzysztof Borowski

Emily Wotan gets up at six in the morning. She has kicked her covers off during the night which makes the escape from the bed easier than she prefers. She shuffles into her small kitchen and puts the kettle on. After brushing her teeth she has coffee and realizes how backwards that was, so she goes to brush her teeth again. Standing in front of her small mirror, she wipes toothpaste foam from the corners of her mouth with a towel and glances at her own reflection, which is enough to paralyze her stare. Her dirty blond hair is still short but it is growing back much faster than the doctors anticipated. Her cheeks have much more color than they had a few months ago. She pulls up her shirt and stares at her scars.

It has been months but she still cannot stop staring at the scars for minutes at a time.

She breaks the trance and finds day clothes. Her cellular informs her of voice messages from some charity asking for money which she promptly ignores. A text message from John arrived during the night which she doesn't bother reading. She notices mold on the air vents right above her as she takes the elevator into the basement garage. She considers the survival of this organism and wonders whether it is the air exhumed from the vent or this pale green fuzz that does more damage to her body, to her lungs, to her sense of humor.

She almost fumbles her card key when opening her company car. The dash says hello, and notifies her that the hydrogen cell must be refilled within twenty minutes. The seat conforms to the curve of her body with a pneumatic moan. The radio uplinks with the satellites and begins broadcasting the BBC news channel. She has no other radio channels preset other than the news. It talks about a genocide on a different continent and a chemical spill in a nearby township. The tigers have once again become endangered. She thinks, that's fine, stripes were never that majestic on cats anyway. Emily Wotan has always been a dog person. She smiles as she looks into the rear-view mirror. Until she switches to manual control, the rear-view mirror displays a video advertisement for breakfast cereal. The radio finally begins talking about the attack on the water system.

The car sighs into submission but there is no traffic as she enters the roads. Most people have left the city after the terrorist attack. The sulfide smell isn't noticeable unless one ventures into the hydro-banks, which are well under streets. In a way, the attacks were well planned, thinks Emily; strike the energy source of a hydrogen cell society and you make a big mess. The outrage at a clean energy source being a terror target is nowhere to be seen. The radio mentions the costs of the clean-up, the costs lost due to the evacuation and absence of hundreds of thousands of people, and the costs that security forces are facing by failing to anticipate this sort of attack. She thinks, yes, the technology for city wide hydrogen-based energy production is so new that everyone is approaching this event as a test. This is a dry run, a dew-drop of what would happen if more impressive chemists decided to destroy the energy infrastructure of the city. A bunch of cells burned out, melted equipment, layers of tainted under-city waterways and maybe a few frustrated engineers and scientists are the only things that are left to show that something happened here. No one died. At least, no one has died yet. There are fail-safes in the system, and they went off. The health effects on the people of the city won't be known for a while. The problem with tainting the water going into energy production is that the same water goes into public consumption and use. She is certain there will be lawsuits. She speeds well above the speed limit in her car as a sad smiley face blinks next to her energy reserves on the dash. She drives through red lights and wonders why anyone bothers keeping the traffic lights on with an energy crisis going on.

Emily has been keeping her energy use at a minimum, but this sacrifice means little when most of the consumption has halted. There is enough energy stored to deal with this issue and clean up the town, and Emily has the pleasant job of handling the clean up. She does not understand why people left. Then she realizes that maybe brushing her teeth twice this morning may have been a bad idea. No one knows what was placed into the water systems yet, but hydrogen sulfide is what came out. She sets the car to automatic and opens a pack of gum. Spearmint is her favorite. Considering the name, spearmint, she associates the word 'spear' with amazons, and thinks about their archery optimization through breast removal. As she grabs a stick of gum with her lips, she wonders if she has become an unwilling warrior. What did her sickness optimize for her? She begins chewing and switches back to manual, speeding up again. The dashboard is scolding her for going too fast with a sad winking face. She responds with the middle finger.

Her car is parked at a refueling station as she takes in the cityscape. Skyscrapers wrapped in smog and a vast cloud, gray with impending rain, are contrasting the large neon signs in primary colors. She pops her collar to shield herself from the morning chill.

Emily turns around to see a new car parked by hers, and a man in an overcoat leaning against this new car. A major selling point of recent vehicle models is the silence with which they travel. A major annoyance, as well.

"Dr. Wotan," the man is smiling, and if the sun was coming through the clouds, his greasy ponytail would be shining, "We met yesterday. Do you remember me?"

She does, but not because he made any sort of impression on her. With her recent antisocial binge, meeting anyone was a memorable event. He is an investigator assigned by the government to deal with energy issues like this one. A spook whose main interests lie in the power management. Her supervisor introduced them yesterday during a chaotic briefing about the terror attack. He is leading the investigation into the incident. The government (and major energy stock holders, according to some of the reporters she overheard) has pulled some heavy strings to get this man on the case. He had a history with these things. A year or two ago she might have looked up who he was to understand what she was dealing with. Today she does not care.

"Mr. Albereich," she folds her arms across her chest. It feels wrong, somehow uneven, and she immediately wants to undo this position. But she is being watched: judged, examined, *estimated* by this man in his coat. and so she cannot risk to show weakness, "Am I being stalked by your government instruments or something? Tracing bug in my undies, microchip in my brain with a GPS uplink?"

Albereich laughs and looks to the ground, "It isn't that difficult to find the only other active car in the city. You turn on the traffic reports, and the computer picks you up as the biggest congestion."

The biggest congestion forces a smile, "What would you like, Mr. Albereich?"

"Today is the big day for you, isn't it?" Albereich looks up to the skyscrapers and back at Emily, "You have to flush out the system. I'm amazed that such a clean-up and reactivation procedure isn't automatic. I mean, our cars drive themselves, but their fuel is still dependent on one person."

"Every machine needs a master. I'd like to get this out of the way as soon as possible," Emily says and walks closer to her car.

"The main underground compound has been sealed up by my men," Albreich's smile fades and he reaches into his pocket. She watches him pull out a keycard with her company logo. The logo is a ring of clean energy solutions: cartoons of wind turbines, water-dams, and the sun outline the ring. Inside the card lies an electromagnetic pulse which will open most doors in the main compound. Emily does not know this. Albreich does, "Can't be too careful right now. But I must tell you Dr. Wotan, having spent a day at the place I feel like the security was too tight for this to be anything other than an inside job."

She takes the card as he continues, "I've worked with nuclear energy companies before, and you can imagine the security those guys employ. You guys hold up a match to the reactors, I have to say. You should be proud, it would have taken a really brilliant mind to get into the compound without proper authorization."

His tone, suggestive and accusatory in such a subtle way that it is almost unnoticeable, causes her to stare at him in frustration. He complimented her on her education yesterday more than a few times. The word 'brilliant' was used. He is sneering, but not physically.

"The card will open up all of the recovery section for you," he runs his hand through his oiled hair, "And I would like to come along. Don't take it the wrong way, you're not a suspect right now."

Emily is thinking, bull, wash your hair. She's not a suspect right now because she has to flush out the system. She hopes the hair part reaches his subconscious, he may actually be attractive if it wasn't for the grease, "I have no problem with that. But you might get bored. I'm just flushing the networks and shifting the cells."

The spook shrugs and his smile returns, "You could explain the whole process of getting energy out of this stuff while this happens, it seems rather amazing. Would you like me to drive us there?"

Emily detaches the fueling cord and opens the driver side door, "I'd rather take my own car. The risk of theft is too high in this city," she sneers back at him, but not physically.

She puts the car in manual and beats him to the compound by three minutes.

The compound is colloquially called the Rhinemaiden. The flow is the Rhine. The compound is the best place to control the flow into each city system: energy, public use, waste disposal, agricultural and industrial needs are all filled up from the Rhinemaiden. Flow is diverted based on need for each system. The workers here joke that if the Rhinemaiden was an actual woman, she would be frigid and always PMS'ing. Break downs in the flow do not happen because there are armies of technicians at the Rhinemaiden constantly. Otherwise, they would be constant. The Rhinemaiden may be a technological marvel, but as any first, she has plenty of problems.

The Maiden is the first facility in the world to run the first city which is powered (mostly) by hydrogen fuel-cell technology. The drive for clean energy has built the city with nuclear power and the remnants of oil, in order to expand the options of humanity beyond nuclear and oil. Sun and wind are conditional sources of fuel. They can be moodier than the Rhinemaiden. The city itself is filled with people of all sorts. Some are eager to participate in this marvel of clean, environmentally friendly energy, while others were settled in the city before the conversion began. Technicians and their families line the smaller communities outside of the Maiden. It is a large scale endeavor. The Maiden is thus a large complex of offices,

labs, and machines, all wrapped around highly active and highly dangerous pipe structures. The general layout is similar to a spiderweb, with connections to each city system and an ecologically safe tube that empties into the ocean. The tube is multiple football fields in radius. It is sealed with a mesh of the most stain-resistant alloys so that fish don't come in and animal rights activists don't get upset. Every few days, the cameras pick up a melted crab. The output technicians find it hilarious and have a death pool going on sea creatures. Most ocean life does not dare come close to the tube, however: the tube is always being emptied and so the pressure is too high. Except for now. If it wasn't for the mesh, krill and shrimp would probably be clogging up the pipes. Krill and shrimp sometimes like warm water. The Rhinemaiden hates seafood.

Emily is walking down an innermost passage to the flow control room. Her new pony-tailed shadow is never far behind, but stops to chat with some of the guards he has planted in the halls. Emily realizes they are all very well built. Wearing gas masks makes it seem as though not one of them has a face. Emily used to rock climb, and knows enough about muscle groups to understand that these men had been filled with drugs to look like they do. They are sporting lead. They have grenades on their belts. She hasn't seen a mountain peak in two years.

"The thing that struck us," Albereich catches up to her and begins, "Is how clean the whole operation was. There are no signs of forced entry. In fact, there's no signs of entry at all. The records of the evacuation are crystal clean, and before that the only people who were in the compound were the staff. Who we've all interviewed. We have not interviewed you, Dr. Wotan, but you haven't been at the compound for over two weeks."

She had spent the last two weeks at home. She does not remember most of it. When she got the call yesterday morning she thought it was a joke from her supervisor. She thought he just wanted to get her out of the house, cheer her up somehow. Emily and Albereich continue walking.

The locks on the door to the flow control room had been upgraded. Her old card does not work, so she uses the one from Albereich. The lock chimes and the door-handle becomes malleable in her hand. She twists it and sees the control room for the first time since the construction of the compound. The room is cavernous. Screens and operational posters line the back wall. Lockers with operating instructions line the right wall. Albereich takes the first step inside and she follows, immediately breaking left toward a table-top panel which is blinking stand-by messages. She runs her hand across the table-top and it shines to life, displaying the giant web she has found herself in. Some pipes appear in a healthy green, but most are yellow and red. Almost like the spider of the web caught a small bird and decided not to clean up the blood spray. She finds comfort in the vicious nature of the compound.

"Please check the operations history, Emily," Albereich closes the door behind them and Emily feels her eyebrows twitch at this man saying her first name.

"Way ahead of you."

She sets up the system and searches. For a moment Albereich does not bother her, but she does not think this is his nature. She is correct, and he breaks the silence.

"Don't you think the whole clean energy thing is a sham, Dr. Wotan? You work closer to it than most. How similar is the actual situation to what the public believes about this place? We used oil to build this facility, after all. Is a fuel source truly ever clean? Ends and means are a funny thing."

"Are you trying to have a philosophical discussion with me, Mr. Albereich? I had no idea government security personnel had any need for that."

"I understand if you feel that we are violating your ivory tower Ms. Wotan," Albereich drops her title, "But trust me, I am here to keep our human energy resources virile. Our ultimate goal is the same: making sure that fuel is available for our citizens and economically supporting this country. The weapons that my men carry may not be parallel to your idea of progress and science, but I know for a fact they decrease damage to your ideals."

I'm not a pacifist, thinks Emily. You assume too much, thinks Emily. She pulls out a keyboard and types in commands to search through the activity history of the compound. Nothing seems out of the ordinary. No public visits. Everyone who has been in and out before and during the attack had the required security clearance. She checks the pipe control history. She almost does not check the tube control history.

"Someone reversed the flow of the tube an hour before the system broke down."

"Is that so," says Albereich.

"This doesn't make sense. This wasn't in the design documents, the Maiden isn't supposed to be capable of this."

"The Maiden?"

"The Rhinema--, nevermind," Emily traces the user responsible for the change. The screen flashes the admin account. The admin account is not in use by anyone. It is connected to a keycard and only one exists, for system emergencies only.

"Who reversed the flow of the tube, Dr. Wotan? And why would that cause this much damage?"

"It wouldn't," she pauses. It wouldn't, unless there was something on the mesh, heading back into the compound through the tube. But there's no way anyone was equipped well enough to weave the mesh with chemicals. The water pressure, the conditions, the heat from the tube would not allow anyone to create this set up below the waves without being well funded. A submarine capable of performing delicate work at the depth of the tube. It was too deep for anything else. But due to the speed with which the pipes turned sour, the speed with which the cells began to burn up, the chemical agent had to be prepared ahead of time. It could not have been shot at the tube, thinks Emily. She checks the tube cameras, usually used for crab reconnaissance. Albereich walks back to the door and stands in front of it.

The footage from the cameras is missing from two hours before system failure up to half an hour before. Albereich watches with her. The control room isn't very big. She checks the video records, and is notified the recordings stopped at the same time as the reversal of the tube flow. The admin account, again.

"How can you clean this out?"

"The pipes must be emptied into the ocean," Emily starts a trace on other activities the admin account has recently done, "The dirty water is flushed out through the tube."

"But isn't that horrible for the ocean?"

"Yes," she scrolls. Her fingers are suddenly very cold.

"To clean out the environmentally friendly energy production facility, you have to cause environmental damage. Doesn't that seem a little counter-intuitive to you?"

"Yes," she is scanning the screen and then becomes transfixed. The last activity of the admin account card is blinking at the bottom of the list. It has been used to open the lock on the flow control room. She is standing in this room.

"Any clues, Dr. Wotan?"

"I have to go check on something else right now," she turns to face the door. Albereich is blocking it, and holding a small handgun pointed at her midriff.

"I feel like you should reverse the flow of the main exhaust tube again, Dr. Wotan. It seems to have locked up and requires a password from someone of your status to work again. Part of the fail-safes installed here, no doubt," Albereich stares blankly and motions her back to the tabletop with the tip of his gun.

Emily scoffs, audibly now, to which Albereich responds with a smile.

She looks downward to the tabletop, "I guess that you're not really working for the government, Mr. Albereich? Or is that a fake name?"

"I am working for the government, actually," he scratches his ear, "But my previous engagements with the nuclear energy commission have left me with quite a few debts."

"Why would the nuclear guys want to take out the hydrogen guys?"

"Money. They built the place you know, their energy source helped build this whole facility. It makes sense that things like reversing the tube flow would lay dormant, hidden away from the technicians. Just in case you want to get an upper hand in the business, you leave little gadgets like this."

"Gadgets," Emily repeats, "The clean, cell-fueled city fails, and the people fall back on nuclear energy. Is that the plan?"

"Something like that. Of course, those in the know make a few stock transactions filtered through foreign accounts right before the news breaks about the terror attack. Then the world hears how the city is ruined, billions and billions of international dollars wasted, and they realize how easy it is to mess with this energy source. You know how loud the lobbyists are being about this right now. Especially those with enough invested in nuclear."

"You want me to pump more water into the system?"

"Yes," Albereich sighs, "The effects weren't as large as my employers hoped. The reactions simply didn't do enough damage. The tube turned the flow into the original direction and secured itself with the password, which you have. By this point, all the attention turned on the facility and we could not afford anything but subtlety. I just want you to finish this up for us, that's all."

"And once I ruin the entire city, I can just walk on out of here if I promise to stay quiet about all this." Emily puts the sarcasm on a little thick.

Albereich smiles. "You really have two choices. You pump into the city like I want you to, or

you flush out of the city and cause cataclysmic change to this region of the ocean. You know how ruined the system has become, and how much will die if you go ahead with your clean up. The keycard will open the command to reverse the flow for your use. You can't save this city anymore, but you can push it closer to destruction to save the environment it feeds off."

Emily leans on the table-top controls and grimaces. She taps the table with her fingers, drums out a random beat pattern.

"Please don't make this harder than it has to be," Albereich says, "If the situation was different, I would have liked to take you to dinner or something similar."

"You could still do that if you washed your hair and put the gun away," Emily stands akimbo and pulls the keycard out of her pocket.

"You were right when you said that every machine has a master, Emily. I have mine, and in a way, I'm no more human than this whole place. I cannot just do whatever I want. I have obligations. Sometimes I think death is freedom from things like being controlled and having a master. Maybe the compound wants that freedom from you. Maybe this whole city does. You should set them free."

"You're an idiot."

"Maybe, but I am holding the gun."

She cannot argue with that logic. She swipes the keycard and sees new commands appear on the screen. She opens a command line and begins filling it with a blur of text. The commands are not the ones that became available thanks to the keycard, but Albereich does not know this. He is still blocking the door, but he is pointing the gun down now, his defensive posture gone, his face tired. His panache has withered. He feels guilt.

"Thank you, Emily." He allows her to type for a while longer.

Emily dramatically pounds a final entry on the tabletop and turns to face Albereich. She walks into the center of the room, her eyes never leaving his, pushing at his retinas with her cool glare. She does not let this up as he raises the gun again.

"Is it done?" Albereich cocks the gun and quickly glances at the tabletop. He's too far away to read any of the messages displayed on it, or the countdown slowly approaching zero.

"You weren't around when the tube was reversed last time, were you?" Emily cracks a sly smile. Albereich reaches out further with his gun and frowns.

Her feet move on their own as her mind counts down. Albereich seems confused, and as Emily steps toward him he grips the gun tighter and targets her head. She buckles downward, as if to pounce. The lights flicker, and go out entirely.

Albereich panics. He fires three shots, the shots lights up each time but there is not enough muzzle flash for Albereich to notice Emily slipping behind him. He moves forward to grab her, thinking she is still ahead of him. When he hears the door open he immediately swings back and fires off another shot. He holds this position, breathing sharply, his chest heaving and his adrenaline pumping. A flashlight shines into the room, as the door is now ajar.

"Sir!? What happened!?"

Albereich curses. The lights turn back on.

He is standing in an empty room, holding his hot gun, with his temper flaring. He almost shoots the man shing the flashlight in his face. Even though the lights are back on, his eyes still burn from the torch. His ego burns too. His guilt is gone entirely.

"Did you not see her run out?! She's one of the terrorists, find her now!" He yells at the soldiers standing outside the door. He sheaths his gun under his coat and briskly walks out of the room.

The room hums with nothing but noise of machines and the drone of the table top computer. This continues for another minute.

Emily rolls out from underneath the tabletop and slowly crawls over to the door. She gently pushes it to a close. It locks. While she is pushing herself off the ground, the keycard falls out of her jacket onto the linoleum floor and lands face up. After picking it up, she re-examines her situation and goes up to the table-top. Two choices, she thinks.

She slides the card through the reader and all her options are open again. The map becomes enlarged, live video footage explodes onto the tabletop, and she looks for a way out. She begins locking doors selectively, clustering the armed men into smaller and smaller areas, restricting their movement. She is slowly breaking the webbing that these little spiders can use.

"Little gadgets," she whispers under her breath, to herself.

Emily formulates a path in her mind which will act as her exit. She may have to jog a bit, but her locks will slow the soldiers, or mercenaries, or whatever they are, down. She has cleaned her path as much as she can. In one of the camera feeds, she sees Albereich stop in a lab room a few hundred meters away. He is on a mobile flip-phone, and looks irate. He is looking at a lab bench, and then is looking up at the camera, and he slowly closes his phone. Emily sees the epiphany in his eyes. She immediately shuts down the security cameras in the complex, and walks to the door. There is no time to stick around any more.

Before she opens the door, she pauses and looks back at the table. She stares at it in the same way she stares at her scars.

Seconds pass and she feels the pressure of every breath she makes and the dryness of her mouth. Two choices.

Emily Wotan walks back to the table-top and enters a series of tube instructions which will execute half a minute after she exits the room. She breaks the keycard in half, and the image of the ring, shattered, lays motionless on the floor as she exits the flow control room of the Rhinemaiden.

She walks with a stern pace through her preconceived path. No one can get to her, but she hears voices and banging on the doors. The turbines which connect the compound begin to turn, and she feels the heavy rumble echo through her feet and into her entire body. Her reflection on the marble floor picks up the pace and begins to run, and she follows.

By the time Albereich and his team open the flow control room door with a blowtorch, Emily Wotan is driving a stolen car north. She is taking a road alongside power lines. The sun has come up and the reflections on the power lines make them look like Christmas decorations. The flow in the tube is now irreversible.

She is 50 miles away from the city when the tracing bug in her underwear begins sending out its location in short bursts of radio frequency.