



Factory of Death

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For over fifty years, hundreds of employees at the "Electrochemical Industries Ltd." (EIL) factory in Akko (Acre) were exposed to carcinogenic and toxic substances. As a result of their exposure, employees suffered from various health problems, including: internal bleeding, loss of teeth, cancer, skin and liver diseases, impotence or sterility as well as serious psychological problems leading to institutionalization.

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Those employees displaying symptoms of mercury poisoning were sent for a "recovery" period working with other dangerous chemicals. The management of "Electrochemical Industries Ltd." actively concealed their hazardous procedures from the public by having their employees bury toxic waste underground, and mislead governmental authorities. The employees themselves were manipulated and often threatened to keep silent about the illegal and hazardous procedures taking place at the factory. Experts agree that this is the most severe case of industrial poisoning in Israel's history.

The employees of “Electrochemical Industries Ltd.” in Akko experienced one of the most severe environmental and health ordeals in Israel.

Only after the large explosion at “Electrochemical Industries Ltd.” in 2003 did the truth about EIL's neglect of their employees' welfare emerge. Those employees diagnosed with illegal exposure to mercury were sent to work to the vicinity of another carcinogenic material, in order for them to “recover”. Dozens of employees became ill with cancer and liver diseases, underwent amputations, other surgeries, became impotent or sterile or were sent for psychiatric treatment. On orders of EIL management, employees buried hundreds of tons of toxic waste on the factory premises. Prior to environmental inspections, employees of EIL were told to shut down polluting machinery. Only now have the employees dared to speak for the first time of the fatal diseases, the deaths of their friends and the horrific atmosphere in the factory.

They were four but now they are three. Tania (alias) emigrated from the Czech Republic, Tsilla Fishman from Lithuania and Valentina Lazar from Russia. After settling down with their families in Akko and its suburbs (the "Krayot"), they began working as laboratory technicians in the analytic and gaschromatographic lab of the electrochemical factory in Akko which became their place of employment for twenty-five years. At the factory they met Illana (alias), an Israeli “sabrá” and veteran employee of the lab. During the first decade of their employment, the future looked promising. They married and were raising families, and they met every morning at the entrance of the lab to don their white coats and go to sit at their regular places for another day of work in the largest PVC factory in Israel.

Despite the fact that this was the smallest department in a huge factory which employed hundreds of people during its period of peak production, these four women were a highly important link in the production chain. They tested and assured the quality of the raw materials as well as the final products that were manufactured. New samples of the raw materials taken from the machines and the production lines were brought to the lab each day. Dozens of test tubes, flasks and huge gas balloons were placed in the narrow corridor entrance to the laboratory, waiting for analyses of the chemists. The materials entering the lab were among the top dangerous, poisonous and carcinogenic materials in the petrochemical industry: Vinyl Chloride Monomer (VCM), Ethylene DI-Chloride (EDC), Mercury and Iodine.

Thus these four women who all held bachelors degrees in chemistry, worked with poisonous materials which polluted the air of their small lab. The fan (which was intended to be used for clearing the poisonous gases from the lab) had not been functioning for many years. The old gas balloons often leaked and flooded the lab with carcinogenic VCM clouds. The women knew that

each day at the lab re-exposed them to dangerous materials. According to them, they approached the management with the requested that the fan be changed along with the leaking balloons and the old equipment but to no avail. So the women quickly realized that this was their reality, and these would be their working conditions. They were told if they didn't like the conditions, they were free to leave. The women figured they could cope with the poisons but not with unemployment. One was a widow, the second's husband was unemployed, and each of the women had families to support. These were among the reasons why the women opted to keep their silence rather than losing their jobs.

Thus the women kept silent. Then Tania began to suffer from internal bleeding, and several months later she underwent a hysterectomy. A year later the women visited Fishman at the hospital after she had undergone the same operation. The fear of being fired plagued their thoughts once more even when Valentina told them she had been diagnosed with uterine cancer. The women even kept their silence throughout Illana's struggle with uterine cancer and after her death. At the time they became ill, they were all in their forties.

Rain of Mercury

Six to eight weeks rest following surgery was the most that the doctors gave the employees who did not demand more than that before returning to work in the clouds of poisons. Only among themselves and in quiet conversations in the laboratory did suspicions begin to be voiced - suspicions that the ailments were not a mere statistical coincidence but the result of long term contact with carcinogenic materials. "But we thought," they say today, "that we had no grounds to make a fuss since even the health care insurance specialist (the occupational doctor) who had been working in the factory and knew each and every one of us made no mention of any extraordinary health problems. He did not seem to make the connection".

The women's fear of raising the executives' wrath was so overwhelming that they didn't apply to receive social security payment - the basic right of every employee in Israel. "We feared that if we complained or filed a claim for social security benefits, the authorities might arrive and start asking questions by inquiring into what was going on in the lab which might have caused trouble for the factory and subsequently create trouble for us with our bosses," one of them told us.

They were not the only ones who had been exposed, became sick and kept silent. Merchel Bodoga worked in the factory for thirty years most of which he spent in the electrolysis device that contained thirty-six mercury cells. His job was simple. He and his co-workers were required to oversee the proper functioning of the devices and perform routine procedures. In case of a malfunction or a mercury leak Bodoga was to open the cell, locate the malfunction and fix it.

Workers at the device described intense heat in the cells, defective masks that allowed the mercury to penetrate outward, mercury that leaked from the tanks to the floor and even punctures in the piping that would cause a rain of mercury.

Mercury, a substance known for its use in domestic thermometers, is a highly volatile liquid metal. Breathing its fumes in large quantities and over an extended period of time causes the accumulation of the metal in the human body, irreversible damage to the brain and the central nerve system as well as other physiological damages such as deterioration of the teeth and severe trembling of the hands.

In Bodoga's case it started with minor nose bleeds. He did not consider them anything serious or that they might be related to working with mercury. A short while later he fainted in his bathroom and was discovered covered in blood. The doctors diagnosed cancer in his nose and recommended surgery. After a short recuperation the occupational doctor put him back to work - this time away from the mercury. He was placed to work with a device that was producing the cancerous gas VCM. Two years later he was diagnosed with metastases in his sinuses and other parts of his body and was admitted to hospital for a second surgery. An American doctor who specialized in cancer was visiting the oncology department of the Naharia hospital. He posed Bodoga the poignant question: Where do you work?

Bodoga's wife told his friends that he had often said that he would never retire from the factory. He said this at the time when he was young and still healthy. Bodoga's words rang true on November 2, 2002 when he passed away at the age of fifty-eight. He had worked for thirty years at EIL just six years after his first diagnosis.

Jean Madar, Bodoga's friend, emigrated from Tunisia in the nineteen fifties and worked for twenty-two years maintaining the electrolysis cells. He did not suffer from nose bleeds, but he was diagnosed with mercury poisoning in his urine. He, too, did not think his situation was serious. "We are taking you out to three months of refreshment in the VCM department, after which you'll return to electrolysis," he was told several times by the occupational doctors of the factory. At that time it was already widely published within medical literature that a person must not work with mercury after initial mercury poisoning had taken place. VCM, an odorless gas, was recognized as early the 1980's as a cause of liver cancer as well as skin and eye diseases. But Madar continued to work trusting that the doctors knew what was best.

Up until 1994 everything seemed fine. Although his teeth and the teeth of his co-workers began to disintegrate and the trembling of hands became increasingly common among the factory workers,

Madar was still exposed to mercury. Then nausea began and he had difficulties getting up in the mornings. Soon afterward he was diagnosed with a tumor in his Pituitary Gland at the base of his skull. At the age of forty-three, he underwent his first brain surgery. After losing sight in his left eye he underwent yet another surgery in 2001. Today Madar is confined to his home. He has two large scars on his head, is blind and nearly deaf. Madar spends 500 NIS each month on medicine and makes frequent visits to the oncology department of the Naharia hospital.

The electrolysis workers admitted casually in interviews that they all lost their teeth. But they hadn't worried because the factory provided a dentist who fitted each of them with false teeth.

Electrolysis was only one of the many dangerous procedures in the factory. Saadia Banon emigrated from Algeria towards the end of the 1950's and during his thirty-three years as a shift manager at EIL he worked with most of the factory's machinery. During the mid-1980s he began to feel something might be wrong. After each of his medical exams in the factory, the doctors would ask him to repeat the tests once more. He claims that the doctor told him he didn't like the results but he didn't elaborate. Banon kept on working. After all, someone had to feed his seven children. He was not fazed when his kneecap was amputated since it was explained to him that the knee was strained as a result of constant standing on the job. He was then hospitalized for breathing problems. Many of his co-workers had been suffering from the same thing, he said, and continued to work. But in 1993 at the age of 63 he was called to the main office by the management where he was thanked for his devoted service and was given early retirement. In 1998 his condition deteriorated, and he underwent throat surgery after a diagnosis of vocal cord and larynx cancer. Today he is confined to his home where he barely succeeds in breathing and talking. At no point in time did he think his ailments were work related.

A Third World Phenomenon

The lack of health considerations for workers remains an ugly condition among under developed countries. This is blatantly untrue for the US or Europe. When considering health conditions at EIL, one is reminded of contrasting situations vis a vis the work and health environment in a country such as Israel and health conditions at EIL.

As a hotbed of ill health the situation at EIL is in complete contrast with ordinary health attitudes in Israel. In describing the case of Yousouv Lazar who emigrated from Romania with his wife and three children in 1983, the conditions are in stark relief. His ailments began with stomach pains. Later he began to vomit blood and noticed that his urine was a strange color. He was soon diagnosed with Hepatomegaly (a swollen liver) and began to swell up as a reaction to the medication

he received. However, he did not relate this to his work. He only made the connection after he noticed many of his former co-workers names in the obituaries – a matter of a short time after their retirement from EIL.

This investigation deals with exposure to toxic materials leading to death. An example has been made of mercury as one of the causes. The phenomenon of cancer is just as prevalent among workers with Vinyl Chloride Monomer (VCM) which flowed from leaking taps of old metal tanks. This chemical contributed to death by liver cancer of many workers at EIL.

The roll call of names of Prosper Lazami, Yaakov Cohen, Moshe, David, and many other employees at the EIL are kept at the newspaper's desk. They were diagnosed with enlarged livers and spleens, cysts in their lungs and kidneys, severe heart and breathing problems, disintegrating teeth, skin peeling and burns. Included are other ailments such as sharp rises in blood pressure, ulcers and gall bladder stones (Cholelithiasis). According to medical literature all of these illnesses are directly connected to mercury, VCM, Ethylene DI-Chloride (EDC) and the other dangerous chemicals to which the employees were exposed throughout the years. Most of them were in their early forties when they became ill.

Over a hundred employees of EIL factory, as well as the relatives of the late Merchel Bodoga, are represented by attorney Erez Shneorson in a damage suit that is to be brought before the circuit court. This case is one of the largest claims ever filed in Israel against one employer.

Upon Shneorson's request, Dr. Shuki Goshen, head of the department for occupational medicine in the IDF (Israel Defense Force) and an independent consultant in this field interviewed the employees and examined their medical records. According to his findings, thirty-four employees out of one hundred suffer from liver, pancreas and gall bladder diseases - well known as resulting from exposure to VCM. Half of the employees were also diagnosed with cancerous tumors. Seven underwent amputations of various types. Six more went through surgeries of their digestive systems. Fifty-three employees suffer from neurological disorders, such as head aches, dizziness, balance disturbances and severe trembling of the hands - all known to be caused by exposure to mercury and VCM. Twenty-four employees were diagnosed as impotent or sterile. Forty-one of them need psychiatric care and suffer from depression and anxiety, both of which are linked to exposure to mercury. Seven already went through forced institutionalization. Forty workers suffer from heart diseases and high blood pressure. Thirty-eight suffer from breathing disturbances such as acute asthma and lung blockage. According to Dr.Goshen all these diseases are caused by their exposure to toxic acids and other substances in the factory. One of the employees was diagnosed with cancer in the vocal cords and pharynx. Thirteen suffer from various sinus illnesses and the destruction of nose partitions which are typically associated with exposure to mercury and strong

acids. Twenty suffer from skin inflammations, changes in their skin color, brown sweat and cancerous skin tumors; classic symptoms (according to Dr. Goshen) of exposure to chloride, VCM and solvent substances.

One of the workers discovered a cancerous tumor in his brain's blood vessels (Meningioma), a direct result of long term exposure to VCM. Dr. Goshen asserts that all above diagnoses could be directly linked to the toxic substances with which the workers had come in contact: Mercury Ethylene DI-Chloride (EDC, a toxic fluid with strong odor, known for years as damaging the respiratory system and other parts of the human body), Vinyl Chloride Monomer (VCM), Chlorine, Hydrochloric acid and Sodium Hydride. According to the medical documentation dozens of employees whose work involved them directly or indirectly with the electrolysis device caused their serious illnesses. Whether by inhaling the mercury fumes or gathering material from the mercury pits, they had been inhaling fumes when the mercury dripped or leaked from the electrolysis cells to the floor beneath their feet. The powdery mercury which fell to the ground also affected them. Workers described that a slight gust of wind invariably cause the entire factory to be covered with a fine filmy layer of mercury. The names of four women are listed at the bottom. These are the four laboratory workers who suffered cancer and tumors in their uteruses and ovaries. As mentioned above, three of them underwent hysterectomies. One passed away.

"This is the worst case I have ever encountered", says Dr. Goshen. "Summing up the information from the employees and their medical records, I did not find one single healthy worker out of those one hundred who were examined. And these are only the employees that we checked. There are hundreds more still sitting at home and I am convinced that among them, too, there are many that are sick. I haven't found such a grave phenomenon of such large-scale toxicity in the world of professional medical literature. Only in third world countries can you find today the combination of one factory that integrates within its manufacturing process so many toxic materials, and such a large number of sick employees who suffer from such a large variety of diseases. In the US and in Europe it has not existed for years."

With regards to workers who were being poisoned repeatedly by mercury, Dr. Goshen is very firm: "I've heard from them that instead of removing them away from the source of danger (the mercury), they were transferred for a "ventilation" period to work with the device involving VCM which is a carcinogenic gas. Later they would be repeatedly sent back to work with the mercury and declared cured. This is against the law. A person who has suffered from mercury poisoning must not go back to work with mercury. I learnt from the employees of this factory that there was total disregard for the law. Thus they were exposed to repeated mercury poisoning. This causes accumulative and irreversible damage. Where were the factory's occupational doctors? What happened to the follow-

up they made on the workers? Judging from the medical files, all of the medical and hygiene follow up was invalid."

Workers had said that dangerous materials were buried on factory property. So Attorney Shneorson and private investigator Giora Yavin took soil samples from the factory's property to the Aminolab where they were examined. As a result of this examination they found that the soil contained concentrations of mercury 152 times higher than permitted by law. Some samples revealed the concentrations of mercury to be 1,843 times higher going up as high as 24,125 as well as having exceptionally high concentrations of EDC.

"The damage to the soil is permanent and irreversible." said an expert on water quality and soil contamination from the Israel Institute of Technology in Haifa. (The expert who related these findings requested that his identity remained undisclosed.). "These substances permeate into the soil and reach the aquifer. From human health aspect the damage is immediate once the substance reaches the water that we drink."

Breaking the Silence

After decades of silence it was difficult to convince the employees of EIL to be interviewed for this article. Conveying their sufferings to an outsider as the poisons accumulated in their bodies was difficult in itself. They now expressed their anger towards the factory which had been their home most of their lives as well as the sufferings they had endured from the poisons they had inhaled. They emphatically included the managers in these negative outpourings. Breaking their silence of years they began to reveal their personal histories to an outsider, a complete stranger.

All of them are ill and they spend the majority of their time in hospitals or often at the funerals of former co-workers. The breaking point came in October 2003 when the factory closed due to a huge fire which left them without jobs, salaries, pensions and no future. "When I have no future, I have nothing to fear," said one of them in tears.

They began talking only after long preparatory discussions and after they became convinced that the information disclosed was intended for a journalistic article but not for the factory's management or the ears of the worker's union leader, Sammy Biton, who harassed them.. Slowly they began to expose what they called their "insurance policy". One pulled out a stock of original factory documents from behind a painting on the wall. Another drew out a file of internal correspondence of the factory's management with the Ministry of the Environment from the bottom drawer of a remote cabinet in his house. One had left copies of managers' paychecks deposited for safe keeping with a neighbor. "I always knew that at some stage the factory would collapse or explode and that's why I decided to take documents out of the factory," one of the employees who

had been working at EIL for over 35 years said painfully.

Most of them demanded anonymity - fearing it might hinder their present struggle aimed at receiving the rest of their pensions and compensation they were entitled to by law.

A Bit of History

Frutarom Factory - Electrochemical Industries Ltd. in Akko was founded in 1952 on an expanse of 112 acres of golden sandy soil on the shores of the Mediterranean. The newly born state was striving to erect technological factories which would form an umbrella of industries and provide jobs. A group of American investors decided to found a factory for the manufacturing of Caustic Soda, Chlorine and pesticides in Akko (Acre). Within a ten year period the factory had already employed hundreds of the inhabitants of Akko and its surrounding settlements. Most of those employees were new immigrants coming from North Africa. The factory became an actualization of the Zionist dream.

In the 1960s the factory was purchased by the Jewish American business man, John Farber, owner of the holdings company ICC, based in New York. Activities were widened during the 1970s to the manufacture of PVC which became a product in demand worldwide. By the mid 1980s the factory brought enormous profits to its owner and to the some of inhabitants of the area. Working there was not only a necessity but also an ambition. One of the senior employees said: "Each employee desired that his son and grandson would work here. "The notion was that if you were in EIL, you were set for life."

In 1983 the factory was in financial difficulties for the first time. Coupled with the enormous profits it had accumulated plus millions of dollars given in financial aid by the government, it was able to weather the crisis. The factory was even able to follow an investment plan in the scale of tens of millions of dollars that included building new production lines and improving the working methods and the production procedures. The factory was back on track again. It was a source of pride to its employees and to the city of Akko, and the whole Israeli industry regarded it as an example of excellence. Prime Ministers, ministers and members of the Knesset (the Israeli parliament) would arrive for extravagant lunches plus a group photo with the management of the factory. Not a week would pass by without EIL's name in the economic sections of the papers.

The 1990s brought competition by other producers worldwide and fluctuations in PVC prices that led the factory to financial difficulties once again. The extensive recovery plan included a large-scale downsizing, mainly of engineers and veteran professional workers. According to the employees, they were replaced by a young labor force which was cheap and mostly unskilled.

"It is important to emphasize the employees' part in the improvement process," said Arie Markman,

the factory CEO at that time, in an interview with a journalist. "Unlike other factories, our employees understood the connection between the factory's financial state and their own wages, and out of identification with the factory's difficulties they gave away five percent of their wages. In this way they contributed to its competitive ability in the global market". Tsvika Greenwald, the commander of the famous "Tsvika unit" of the "Yom Kippur" war in 1973 and former Deputy CEO in charge of operations in the factory, would declare over the years that the factory's main resources are its employees.

But in contrast with the large efforts of the factory's management to keep its good image as an exemplary working place, it appears that the reality as seen from within was completely different. "Many of my co-workers at the factory are no longer among the living, and I am sorry to say that they did not die of old age", says D., a senior chemical engineer who filled many high-ranking positions in the factory. Along with original factory documents he gave a legal affidavit with testaments of shift managers and regular workers. Claims have been made that even from its founding EIL factory exposed its employees and the nearby inhabitants to enormous quantities of hazardous materials including those designated as carcinogenic. The exposure occurred during the manufacturing processes, during the treatment of sewage and as a result of dispersal and burial of hazardous substances upon factory grounds. In many cases these tasks were carried out illegally and with total disregard for the safety of the workers and that of nearby population.

Dr. Goshen claims that the main cause of the employees' diseases is the cancerous gas VCM to which the workers were exposed for decades. The employees were inhaling VCM in large quantities and in concentrations thousands of percents higher than the legal standard. "The procedure to clean the reactor required that the worker harness himself to a rope and wear a mask over his nose and mouth. This was necessary in the event that he lost consciousness or passed out during his work. Such incidents occurred frequently," wrote engineer R.

"Almost every day one of us would faint inside the reactor," describes one of the workers. As a part of the daily routine the workers were required to enter the tank and clean its walls between 15 to 18 times. "Gases emitted from the sides of the tank would penetrate through the filter of the mask which was worn out or of poor quality. First you became dizzy and then you just fell down. There were many instances where someone had disappeared and was found unconscious at the bottom of the tank. Only then did we start using ropes so that if anything happened we could rescue the worker before it was too late."

In order to prevent a revolt of the workers the management of the factory came up with a creative solution. Instead of setting a time limit for the workers to spend inside the tank, the workers would receive bonuses, which increased depending on how fast they cleaned the tank. The workers said

that in some cases there were lumps of waste piled up inside the tanks weighing up to ten tons. In such cases the workers used to stay inside the tank for ten to twenty hours straight.

Coordinated "Unexpected" inspections

The employees were not the only ones poisoned by the EIL factory of Akko. Each factory owner is required by Environmental Law in Israel to remove the toxic waste it emits to the hazardous materials waste treatment facility of Ramat Hovav in the Negev within six months. This process could cost millions of shekels a year to a factory that "produces" thousands of tons of toxic waste such as EIL. Here too a creative solution was allegedly found which the factory's employees now agreed to reveal despite the fact that they took active part in it.

It devolves from testimonies of the employees that they received orders from the management and the directorate to bury thousands of tons of waste containing hazardous substances such as mercury, EDC and Caustic Soda on the grounds of the factory in huge pits dug for that purpose. They did so until the closure of the factory in October 2003. The burial was done during the evening when the activity in the factory was low. According to the affidavit given by the engineer R., at the end of the 1990's the management of the factory ordered its workers to mix the mercury waste with chicken manure in the attempt to cover up its distinct strong odor and the fact that it was hazardous waste. This mixture was sent to be buried in regular garbage sites. Only the alertness of the municipal sanitation department's worker to which the toxic waste was sent put a stop to this custom. As for the mercury that was not dispersed to the air or flushed in the sea, it has been claimed that the factory concealed hundreds of kilograms of mercury waste underground in scattered locations around the factory where it was immediately covered with concrete. According to the affidavit the factory successfully concealed mercury waste to a weight of about 70 tons which was emitted to the air, the sea and the soil.

Also according to testimony of workers and engineers one of the old devices in the factory which was out of use began to serve as a dumping ground for hundreds of tons of toxic waste. When the pond became filled, it was covered with sand brought by tractors from the shore in the vicinity of the factory. Thousands of tons of EDC were also flown directly to a huge pool dug especially for the purpose of disposing of toxic waste which was located in a remote and hidden area of factory land. This place received the name of "the lagoon" by the workers. Here too, when this pool became filled, it was then covered with sea sand. The workers told of digging more than 20 such huge places on factory land which were used for burying toxic waste between the years 2000 and 2003 alone.

Why did you not report this activity to the Ministry of the Environment or any other authority?

"We were frightened. It was very clear to us all what would happen if someone dared to report this. So we kept silent"

VCM was also emitted in large quantities through the factory's chimneys. In the affidavit signed by a factory engineer, the factory emitted about 490 tons of VCM in the year 2000 alone as part of the manufacturing process itself without including power failures. A maintenance worker reported that whenever there was a power failure in one of the machines, enormous amounts of VCM gas would be discharged into the open air. People in the factory found ways to conceal this, and this time the Ministry of the Environment had played a part.

On March 6, 2001 Dorit Ziss, head of industry and air quality department in the north district of the Ministry of the Environment wrote to Dr. Sara Hirsh who was vice president of development and environment at EIL that she was going to make an unannounced visit to the factory. "As part of our unannounced inspection routine for detecting emission infractions, we intend to arrive within the next few months to your factory for VCM inspection in the PVC drying chimneys." The letter reveals that representatives of the Western Galilee Municipal Union (who were also responsible for the inspection of polluting factories) will also take part in this "unexpected" inspection. Ziss signed the letter containing the news of the "surprise" visit. "According to the arrangements between head of district, Mr. Shlomo Katz and your factory, we shall notify you of the arrival date two days prior to it."

The attitude of the factory towards these inspections can be observed from a memo in the handwriting of the corporate secretary of EIL. Attorney Yair Kohavi wrote on the side of a letter, "I wish that all unannounced inspections would be like this one! It is impossible to find examples of announcing an unexpected visit "by definition."

On April 18, 2002 the Western Galilee Municipal Union paid such an unannounced inspection which was aimed at examining how the factory was handling the enormous quantities of mercury that must be stored on the premises. "Andre will see to it that the electrolysis device will be clean and tidy for the inspection," was an internal memo of the factory concerning the visit. "Nothing can be done about the carbon filter. It is important to remember (and notify the visitors if necessary) that we have a spare part in store and that it is not yet due to be replaced. The learning stage argument will give us the alibi for the first time in which the result is not good."

Four months later the factory received a visit from Ran Ayalon, an inspector from the Ministry of the Environment. His aim was to decipher the concentration of mercury in the waste EIL was emitting into the Mediteranean. Haim Rapport, a member of the factor's management, wrote an

internal memo summarizing the inspection titled; "A surprise visit by Ran Ayalon, marine inspector 26.8.02." "He arrived after half an hour's notice with two objectives: to study the operation of the mercury device and to visit the sewage marine exit. He observed that the west pool was empty and shining clean. I gave the explanation that this was part of our preparations for shipping the waste to Ramat Hovav and consequently we had emptied the pool. He seemed impressed.. . . summing up that the inspection was good and as always we must be prepared for the next visit which will be a surprise and we must always be prepared which will also be a surprise and to be on guard."

Dr Yossi Inbar, COO of the Ministry of the Environment, and Shlomo Katz, head of the northern district of the Ministry wrote in response to these documents that apparently there was a "mix up" of terminology on the part of their senior representatives. The two claim that these surprise inspections are never coordinated in advance with the factory that is to be inspected. However, the two did confirm that the activities of the Ministry of the Environment includes coordinated inspections as well but not with the definition as a "surprise inspection."

Contrary to what they said, testimonies of the employees (backed up by official documents) claimed that most of the visits made by the Ministry of the Environment to EIL with the purpose of monitoring the chimneys or for other needs were coordinated in advance between the Ministry and the factory. Furthermore, they claimed that as part of the preparation for the inspections the management ordered employees to lower the output of the device to be inspected or to shut it down completely so that the inspectors from the Ministry would not uncover any exceptional emissions of the chimneys.

The employees point to Tanhum Kelner (head of the engineering department at the factory for many years and who became its manager in 2003) as one of those who ordered that toxic waste be buried. He firmly denies their claims: "As head of the engineering department I was in charge of maintenance and not of the ecological field. I was appointed factory manager shortly before the factory was closed and during this time I cannot testify that such things happened."

In regard to the burial of toxic waste Shlomo Katz, head of the northern district of the Ministry of the Environment for the past seven years, confirmed that he heard rumors regarding such activity on part of the factory but since there was no hard evidence, he did not find it appropriate to fully clarify the matter. "Should I come across hard evidence and workers would agree to that in court, we shall deeply investigate the matter and if necessary even press charges against the factory managers."

Winning an Environment Award

After having exposed the employees to poisons by burying toxic waste in the ground and emitting it

into open air, the factory hadn't spared the largest natural resource of all – the sea. In their report "The quality of sea water along Mediterranean shores of Israel for 2003," Dr. Barak Herut, Edna Sheffer and Yuval Cohen, all researchers at the National Institute of Oceanography (NIO), mention that despite an improvement in the scale and intensity of pollution of the Mediterranean bay area, there are still two main sources of heavy dumping of metals into the sea: the electrochemical industries in the north (mainly a source of mercury pollution) and the estuary of the Kishon river in the south." Responding to the findings in this report the spokesman for the Ministry of the Environment said, "Each request for emission of sewage is seriously considered and given only under strict limitations while being carried out under supervision."

Even as EIL polluted the natural resources, the Ministry of the Environment decided to grant the factory an award. The following are the winning arguments as presented on the Internet web site of the Ministry. "During 2001 the EIL factory in Akko performed an Ethylene DI Chloride recycling project. The total investment in the project was NIS 650,000 of which the Ministry of the Environment gave the factory a grant of NIS 200,000."

"This is a brilliant idea," says a former senior executive from the Ministry who is familiar with the EIL issue. "Electrochemical Industries is a privately owned factory that for many years had been rewarding a fortune to its owner. Not only has it succeeded in getting the government to participate in the disposal of its own toxic wastes, it has given the Ministry of the Environment the impression that it was playing by their rules. Thus, it managed to successfully get them off its back and on the other hand enabled the Ministry to show the public how well they operate and what results they receive. In fact, it's all a fabrication."

In conversations with many of the factory employees they revealed their feelings that the attitude of management regarding their health and environment resulted from the assumption that none of the employees) would dare to say anything. And indeed, they kept silent.

Nevertheless, internal correspondence of the factory shows that despite the silence of the workers, management was not at ease. At the beginning of 2000 the Ministry of the Environment demanded that the factory perform a survey estimating the pollution of its soil and the aquifer and that this be done by an outside agent. "We need to find a way to keep the results secret," wrote attorney Yair Kohavi, corporate secretary of Electrochemical Industries Ltd (1952)" in his own handwriting to his colleagues. "Obviously we must make the surveyor sign a secrecy agreement but even that is not enough to create a legal privilege.

We learn how much the management feared exposure from the following example as well. CEO Amir Endvalt was invited to lecture at a conference entitled "The Industries Conduct in the Field of

Environmental Pollution," which was held in August, 2000 under the sponsorship of the Industrialists Association and the Ministry of the Environment. "Conferences with the Minister in charge and the presence of the Ministry's executive director and other high ranking officials tend to draw medium rank officials and reporters of local papers," states an internal memo of the factory. "The presence of factory representatives – especially an exposure in the form of a lecture – may raise questions that would cause "inconvenience" for the company when made in the widest forum of Ministry officials."

"It seems to me," the writer of the memo continues, "that in our present state we should focus on practical doing and improving rather than being exposed to situations where there is no guarantee that we would not come under attack. Such attacks could come to public attention and even more harshly become the focus of the authorities with both situations apt to cause severe damage. I therefore suggest that an EIL representative attend the conference as a passive listener and not give a presentation that may bring us to the center of public attention."

This point was reiterated by Sara Hirsh, Deputy CEO in charge of R&D and Environment matters of the factory in an internal memo she sent to members of the board" We must not delve into unnecessary details. In my opinion it is useful to present what we have done and what we do in aspects that we know of (such as mercury) and not be drawn into aspects that have not been exposed to till this day and that would be better kept unexposed such as VCM and EDC."

Amongst the law enforcement authorities concerned with polluting factories are the local municipalities with factories operating in their territory. In the case of the Akko municipality there was a close and warm relationship between the EIL management and Mandi Brown, head of the environment on the city council. Brown began receiving paychecks from the factory as soon as he retired from the council.

The Explosion

September and October were dark months for the EIL factory in Akko and even more so for the citizens in the surrounding area. A chain of explosions and leaks of toxic gases from EIL darkened the Akko region for days. On October 13, 2003 the factory finally shut down after a huge explosion.

The blast occurred at 7:18 in the morning and shook Akko's industrial area. A huge cloud of poisonous VCM erupted from the bottom of one of the boilers producing the substance. Seconds later the boiler was on fire which then spread to other parts of the factory. Almost immediately the whole area was covered with a thick cloud of toxic black smoke. The population and Kefar Masaryk and Ein Hamifrats (both living within a kilometer range of the factory) were ordered to

stay inside their homes for most of the day until the fire would be put out and the smoke dispersed. Immediately after the fire fighters had put out the flames, several authorities entered factory property and began their investigation of the incident. Alongside the internal investigating committee appointed by the factory, EIL was filled with investigators from the fire department, the police, the Ministry of the Environment and even the investigators from the factory's insurance company wanting to estimate the damage and discover what had caused the explosion.

From the testimonies given by the workers who were present at the factory and alongside the device that ignited, it appears that prior to the investigators questioning the workers all were gathered in the dining room of the factory where attempts were made by the factory management to instruct employees how to answer questions concerning factory maintenance and how to avoid giving incriminating answers.

The shift manager who was near the machine when the explosion took place said to his superiors that he did not intend to lie to the investigators. He claims that following the gathering he was called upon to have a "clarifying" conversation with the leader of the workers' union, Sammy Biton, and the factory manager at the time, Tanhum Kelner. According to him, they made it clear that if he exposed the truth, the insurance company might avoid paying him damage claims. When he stood firm in his decision, the workers' union leader had threatened him saying that unless he changed his mind, he would pay a high price.

How Did the Factory Manager Respond to Such Threats?

"Tanhum pulled me aside so that no one would hear and told me, "I have one request for you. Whether you were there or not, it does not matter what you suspect. Try to ignore what happened." I answered, "How do you expect me to do that? I was here at the time of the explosions. I objected to the working conditions beforehand – even to you personally – and we told you that during the last three years we have been afraid to work because we witnessed all the explosions and fires. And then he said to me. "You'll be sorry if you don't shut your mouth."

In response, Kelner said, "I don't think that I said such a thing and I cannot say such a thing. Each person has his duty and his responsibility. The one who should stand before the formal external investigators is the factory authority."

The trial of CEO Endvalt, the factory manager Kelner and the factory itself is being currently held in Akko's circuit court. According to the prosecution, they are charged with causing severe air pollution, violating the conditions of the toxic matters permit, failing to turn over investigations for past incidents to the commissioner and a long line of other felonies that led to four explosions

including the big blast in October.

The employees assert that the silencing and threatening policy was implemented toward their own legal claims – whether they were financial or health issues. One employee said that following his legal suit against the factory for medical damages caused during his work, a senior executive called him and demanded that he drop his suit saying that if he persisted, he'd find himself with his friends. This was a referral to factory employees who had previously passed away. The employee filed a complaint against the executive but the record was closed.

The name Sammy Biton constantly surfaced in conversations with employees who were interviewed for this article as the one responsible for harming the employees, managing the factory and siding with the management. "Yediot Aharonot" possesses documents showing that since being appointed to a management position eleven years ago, he received an exceptionally high salary as well as large financial benefits even at times when the factory was having financial difficulties.

The workers say that since his promotion he changed from being a "regular fellow" into management's attack dog whose sole concern was that the factory continue production and earn a profit. They claim that he is responsible for silencing the employees who wanted to complain. When the factory experienced an economic crisis toward the end of 2000, the employees did not receive their salaries for months. According to workers who asked to remain anonymous, they were distressed and approached Biton as leader of their union for help. They say further that Biton responded violently in one incident, and that he used a factory gun which he carried as a security measure to intimidate the workers. Afterwards the gun was taken from Biton by Shlomo Ben Zimra, the factory security officer. Only a year and a half later after Biton apologized to the worker and promised Ben Zimra that there would be no such incident again was the gun returned to him.

Another employee claims that after an altercation with Biton, he developed a heart condition rendering him unable to work. He is currently struggling with Social Security to recognize the incident as work related. A few weeks ago workers claim that Biton punched a factory employee after the employee complained about the delay in receiving his paycheck.

"I am just a worker at the factory," responded the leader of the workers' union, to these accusations. "I have never received financial benefits during the course of my duties and whoever says that I threatened or hurt him can file a complaint against me at the police." After hearing Biton's response the employees began revealing documents. One of the documents states that when the factory was already having financial difficulty in 1996 and firing many employees, the workers' union leader received a bonus of NIS 270,000. Some of those employees who had been fired were suffering from work related illnesses. Another document from the year 2001 lists the names and salaries of

all the members of the factory's management. At the end of the list appears the name Ester Biton, the wife of the workers' union leader, who had never even set foot in the factory according to the employees. Her salary for that year was NIS 60,000.

Ester Biton commented, "I do not want to respond. Ask my husband." Sammy Biton said "In 2001 I was on vacation for six months due to a work related accident. I had to sit at home. Since I kept working as leader of the workers' union and busted my ass, they paid me part of my salary."

So why was the paycheck under your wife's name and not under yours?

"Do me a favor. This is a problem. Don't publish that because it can burn my ass."

Feeling Nostalgic

It has been more than a year that the EIL factory in Akko remains deserted and desolated. The powerful toxic smells are still noticeable in the area. The Official Receiver will be handling its future. Clearing and evacuating the hundreds of tons of dangerous and carcinogenic substances left scattered in tanks and bags have become the responsibility of the Ministry of the Environment by the decision of the court. The Ministry also pays the salaries of a few dozen factory employees who supervise whatever remains on the premises.

The rest of the employees continue to come to the factory out of habit and some come with hope. They are all desperate. After dozens of years of working at the factory with its history of an unhealthy environment, of surgeries, amputations, hospitalizations and funerals, they now understand what their friend, Merchel, had realized long before his death. They will never be able to retire from the factory.
