

# Fred Leuchter

## The Leuchter Report

### End of a Myth

A Report on the Alleged Execution Gas Chambers at Auschwitz,  
Birkenau and Majdanek, Poland by an Execution Equipment Expert

AAARGH

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## PUBLISHER'S COMMENT

There are few times in history when one document has the potential to shatter such a major historical myth and legend as that of the Jewish "Holocaust," the claim that the Germans gassed millions of Jews to death in concentration camps in Poland during the Second World War.

The Leuchter Report is one of those rare and most precious documents. Prepared and written by Fred A. Leuchter, a consultant in the United States for the design, construction and maintenance of execution gas chambers, the Report sets out the methodology and findings of the first forensic investigation of the actual sites in Poland where the gassings are alleged to have occurred. Leuchter's conclusion, after inspecting the sites and having samples analyzed by a competent laboratory, taken from the walls and floors for total cyanide content, was unambiguous: the alleged gas chambers could not have been used, then or now, as execution gas chambers.

David Irving, the distinguished British historian, has called the Leuchter Report a "shattering" document which was instrumental in hardening his belief that the whole of the Holocaust mythology was now open to doubt. It is a document which "Holocaust" historians can ignore only at the peril to their reputations as objective scholars. After the Leuchter Report, the allegations of genocide perpetrated by the Germans against the Jews, using gas chambers as the murder instrument, can no longer be upheld.

**THE PUBLISHER IS PROUD TO PRESENT THE LEUCHTER REPORT.**

## FOREWORD by Robert Faurisson



Robert Faurisson and Fred Leuchter

**F**red A. Leuchter, 45, is an engineer living in Boston, Massachusetts, who specialized in the design of execution hardware used in prisons throughout the United States. One of his major projects was the design of a new gas chamber at the Missouri State Penitentiary at Jefferson City.

In January of 1988, I was in Toronto, Canada, assisting in the defense of Mr. Ernst Zundel, a German-Canadian who was on trial for spreading false news by publishing "Did Six Million really Die?", a booklet which challenged the prevailing view that six million Jews were killed by the Nazis during World War II, primarily through the use of gas chambers using hydrocyanic gas (Zyklon B gas).



Ernst Zundel had been previously tried on the same charge in 1985. The trial lasted seven weeks and ended with a conviction and a sentence of fifteen months imprisonment. In January 1987, the Ontario Court of Appeal overturned the judgment because of grave errors in law and ordered that a new trial be held. The retrial began on January 18, 1988 and at the time of this writing is still proceeding.

My initial conversations with Fred Leuchter took place in Boston on the 3rd and 4th of February, 1988. I was impressed with the conciseness of his answers to my questions and by his ability to explain every detail of gassing procedures. He confirmed to me the particularly dangerous nature of an execution by hydrocyanic gas.

Executions using this gas were carried out for the first time in the United States in 1924, but as late as 1988 major difficulties still existed in the construction of execution gas chambers, including the problem of leakage. I noticed that Fred Leuchter did not question the standard notion of the Holocaust.

After my return from Boston to Toronto and after I had reported to Ernst Zundel on my discussions with Fred Leuchter, Mr. Zundel decided to ask the latter to prepare an expert opinion on the alleged gas chambers at Auschwitz, Birkenau and Majdanek.

Mr. Leuchter accepted the assignment after a weekend in Toronto reviewing wartime aerial photographs of the camps, plans of the crematoriums and alleged gas chambers, documents on Zyklon B and slides taken of the sites in the 1970's by the Swedish researcher Ditlieb Felderer.

On February 25, 1988, Mr. Leuchter left for Poland together with his wife Carolyn, his draftsman Howard Miller, cinematographer Jurgen Neumann, and Polish language interpreter, Tijudar Rudolph. They returned eight days later on March 3rd.

Upon return, Fred Leuchter wrote his report of 192 pages including appendices. His conclusions were clear: the evidence was overwhelming that there were no execution gas chambers at Auschwitz, Birkenau and Majdanek and that the alleged gas chambers at these sites could not have been, then or now, utilized or seriously considered to function as execution gas chambers.

On the 20th and 21st of April, 1988, he stood in the witness stand in Toronto. At first, he replied to the questions put to him by Mr. Zundel's defense lawyer, Douglas H. Christie, the latter assisted by Keltie Zubko and Barbara Kulaszka. Mr. Leuchter then faced cross-examination by the Crown Prosecutor, John Pearson, an official who had been assisted throughout the trial by another Crown Attorney, a law clerk and frequent consultations with Jewish advisors sitting immediately behind him in the courtroom.



The examination and cross-examination took place in the presence of a judge and an eleven-member jury. In the courtroom, the atmosphere was one of extreme tension. I was sitting beside a number of Revisionist experts, including Dr. William Lindsey, chief research chemist for Dupont Corporation before his retirement in 1985. Everyone in the courtroom, regardless of their own personal viewpoints on the topic under examination, were acutely aware, I think, of participating in a historical event. The myth of the gas chambers was ending.

The previous day, the director of the Missouri State Penitentiary, Bill Armontrout, had given testimony explaining the procedures and practical operation of a cyanide gas chamber. For every attentive listener it was revealed that if it was so difficult to execute a single person in this manner, then the alleged execution of hundreds of thousands of persons by the Germans using Zyklon B would equal the problem of trying to square the circle.



Following Fred Leuchter on the witness stand came Dr. James Roth, Ph.D. (Cornell Univ.), Manager of Alpha Analytical Laboratories in Ashland, Massachusetts. Dr. Roth reported on the analysis of samples taken from the walls, floors, ceilings and other structures inside the alleged gas chambers of Auschwitz I and Birkenau. These tests revealed either no detection of traces of cyanide or extremely low levels. The only exception was the control sample number 32 taken from Delousing Facility Number 1 at Birkenau. These results were graphically produced in Appendix I of the Report and displayed to the jury on an overhead projector. The difference in detected cyanide between the delousing facility on one hand and the alleged gas chambers on the other, was spectacular. The extremely low levels of cyanide found in some crematoria was likely, in my opinion, to have resulted from disinfection of the premises during the war.

I think I was the first to point out that all studies of the alleged German execution gas chambers using Zyklon B should commence with a study of the American execution gas chambers. As early as 1977, with the help of an American friend, Eugene C. Brugger, a lawyer in New York City, I began an inquiry into this area. During this research, I obtained information from six American penitentiaries, those of San Quentin, California; Jefferson City, Missouri; Santa Fe, New Mexico; Raleigh, North Carolina; Baltimore, Maryland; and Florence, Arizona. I was forced to conclude at that time that only an expert in American gas chamber technology could finally determine whether the alleged German execution gas chambers were capable of having been used as described in Holocaust literature.

During the next several years, my articles on German gas chambers always referred to the American gas chambers. These articles included "The Rumor of Auschwitz or the Gas Chamber Problem", published on the 29th of December, 1978 in a French daily newspaper, *Le Monde*, and a long interview published in August, 1979 in the Italian periodical *Storia Illustrata*. I visited the gas chamber in Baltimore, Maryland in September, 1979 and obtained eight photographs of the chamber and additional documentation. Then, during a meeting held in New York City under the chairmanship of Fritz Berg, I showed the Gas Chamber Procedure Check Sheet of the Baltimore penitentiary and discussed its implications. In 1980, in the first issue of the newly-created *Journal of Historical Review*, I published an article entitled "The Mechanics of Gassing", in which I described in some detail the gas chamber procedures used in the United States. In the same year, I published in *Vérité*



*historique ou vérité politique?*, the eight photographs of the Baltimore gas chamber. My video entitled "The Gas Chamber Problem", made in 1982, began with an analysis of the American gas chambers.

In 1983, I prepared for the Institute for Historical Review, Los Angeles, a book in English on the Holocaust controversy which was to include, for the first time, a list of the questions put to the penitentiary wardens and their answers. The book, however, was never published: on July 4, 1984, American Independence Day, the archives of the Institute were destroyed by arson. This fire, for all intents and purposes, destroyed the financial viability of the Institute and a number of projects, including that of my book, were abandoned.

The Holocaust has appeared to be a subject of enormous proportion. But this "giant", as Dr. Arthur Butz has pointed out in "The Hoax of the Twentieth Century," is a giant with feet of clay. To see the feet of clay, one need only go to Auschwitz Concentration Camp in Poland. In the words of Dr. Wilhelm Stäglich, "the extermination thesis stands or falls with the allegation that Auschwitz was a 'death factory'." And for me, the whole mystery of Auschwitz is, in turn, concentrated on the 65 square metres of the alleged gas chamber of Auschwitz I and on the 210 square metres of the alleged gas chamber of Birkenau. These 275 square metres should have been forensically examined immediately after the war by the Allies, but no such examination was ever carried out then or since. The Polish examining magistrate, Jan Sehn, ordered some forensic examinations at Auschwitz but not of the alleged execution gas chambers themselves.

Research by revisionists has shown that the places alleged to have been execution gas chambers could not have been used for such a purpose. Ditlieb Felderer published photographs indicating the flimsy construction of vents and doors to the gas chambers and the lack of Prussian blue stains on the walls. I myself had discovered in 1975 in the archives of the Auschwitz State Museum (archives which are well-guarded by the Communist officials) the plans of these alleged gas chambers and was the first to publish them in various books and articles. These plans were also shown at the first convention of the Institute for Historical Review in Los Angeles in 1979, when Mr. Zundel was present. In reality, these alleged gas chambers had been mortuaries or, as indicated on the plans, "Leichenhalle" for Krema I (later transformed into an air-raid shelter) and "Leichenkeller" for Krema II.

Nevertheless, in order to obtain an entirely scientific confirmation of what simple common sense compelled us to see and what revisionist research work and documents had revealed, it was necessary to look for an American gas chamber specialist. I desperately tried to find such a specialist, but frankly, I had little hope of finding a man who was not only an expert in gas chamber technology, but also one courageous enough to carry out such an investigation in a Communist country and to publish the results if ever they confirmed revisionist conclusions. Fortunately, I was wrong.

Fred Leuchter was this specialist. He went to Poland, conducted the forensic examination, wrote his report and testified in a Canadian court on behalf of Mr. Zundel. In so doing, he has quietly entered history.

Fred Leuchter is a modest but quietly determined man who speaks precisely. He would be an excellent professor and has the real gift of making people understand the intricacies of any difficult problem. When I asked him whether or not he was afraid of any dangerous consequences, he replied, "A fact is a fact." Upon reading the Leuchter Report, David Irving, the famous British historian, said on April 22nd, 1988 during his testimony in Toronto that it was a "shattering" document which would become essential for any future historian writing on the Second World War.

Without Ernst Zundel, almost nothing of what has now transpired would have been conceivable. He sacrifices everything in his search for historical accuracy and lives under difficult conditions, facing influential and powerful enemies. The pressure on him is permanent and takes the most unexpected and sometimes, the most vicious forms. But he has a strong personality and charisma. He knows how to analyze any given situation, to evaluate the ratio of forces, to turn adversity into advantage. From all parts of the world he attracts and mobilizes competent people. He is a profound man, a genius who combines common sense with a keen understanding of people and situations.

He may once again go to prison for his research and beliefs or be threatened with deportation. All this is possible. Anything may happen when there is an intellectual crisis and a realignment of historical concepts of such a dimension. Revisionism is the great intellectual adventure at the end of this century. Whatever happens, Ernst Zundel is already the victor. He is the pacifist-activist who has achieved this victory through the powers of reason and persuasion.

Robert Faurisson  
April 23, 1988  
Toronto

P.S. Ernst Zundel was found guilty by the jury on May 11, 1988 of knowingly spreading false news about the Holocaust. He was sentenced to nine months imprisonment and was granted bail after signing a gag order, promising not to write or speak about the "Holocaust" until the end of his appeal proceedings. He thus joined Galileo.

P.S.S. The Supreme Court of Canada, on August 27, 1992, overturned the conviction of Ernst Zundel and declared the law under which he was dragged through the courts of Canada for nine years as unconstitutional. Canada has refused to apologize to Ernst Zundel for his ordeal, and has turned down his request for compensation for his legal costs, etc.

# The Leuchter Report

A Report on the Alleged Execution Gas Chambers at Auschwitz, Birkenau and Majdanek, Poland by an Execution Equipment Expert

## PURPOSE

The purpose of this report and the investigation upon which it is based is to determine whether the alleged execution gas chambers and crematory facilities at three (3) sites in Poland, namely Auschwitz, Birkenau and Majdanek, could have operated in the manner ascribed them in Holocaust literature.

This purpose includes the investigation and inspection of the physical facilities, design of these facilities, and a description of procedures utilized at these facilities with an eye to determining the quantities of gas utilized, the times involved in these usages (i.e. execution and ventilation times), the physical sizes of chambers relative to the inclusion of occupants and the procedures and times involved in handling and cremating corpses with the intent of determining the veracity and credibility of unsupported operational reports.

This purpose does not include a determination of any numbers of persons who died or were killed by means other than gassing or as to whether an actual Holocaust occurred. It, further, is not the intent of this author to redefine the Holocaust in historical terms, but simply to supply scientific evidence and information obtained at the actual sites and to render an opinion based on all available scientific, engineering and quantitative data as to the purpose and usages of the alleged execution gas chambers and crematory facilities at the investigated locations.

## BACKGROUND

The principal investigator and author of this report on design and fabrication of execution hardware has specifically worked on and designed hardware in the United States used in the execution of condemned persons by means of hydrogen cyanide gas.[See the Third Leuchter Report: A Technical Report on the Execution Gas Chamber at Mississippi State Penitentiary, Parchman, Mississippi]

The investigator has inspected the facilities at Auschwitz, Birkenau and Majdanek, made measurements, taken forensic samples, reviewed design and procedural literature on DEGESCH delousing chambers and procedures, Zyklon B gas, and materials on execution procedures. Much of the reviewed material was literature purchased and viewed at the sites in Poland, including copies of original drawings of Kremas I, II, III, IV and V.

## SCOPE

The scope of this report includes a physical inspection and quantitative data obtained at Auschwitz, Birkenau and Majdanek, literature supplied by the officials at the three (3) museum sites, blueprint copies of Kremas I, II, III, IV and V obtained at the museums, material relative to DEGESCH delousing chambers and facilities (including equipment and procedures utilized with Zyklon B gas), a description of operational procedures at the facilities in question and forensic samples taken at the Kremas investigated.

Additionally, data on the design of U.S. gas chambers and operational procedures coming from the investigator's own personal knowledge and work in the field, as well as, an investigation of U.S. crematories and procedures, were utilized in the production of this report. Utilizing all of the above data, the investigator has limited the focus of this study to a determination of:

- (a) the capability of the alleged execution gas chambers to have accomplished the mass murder of human beings by the use of Zyklon B gas in Auschwitz I and Birkenau and carbon monoxide and/or Zyklon B gas in Majdanek;
- (b) the capability of the investigated kremas to have accomplished the alleged number of human cremations in the alleged time period.

## SYNOPSIS AND FINDINGS

After a study of the available literature, examination and evaluation of the existing facilities at Auschwitz, Birkenau and Majdanek, with expert knowledge of the design criteria for gas chamber operation, an investigation of crematory technology and an inspection of modern crematories, the author finds no evidence that any of the facilities normally alleged to be execution gas chambers were ever used as such, and finds, further, that because of the design and fabrication of these facilities, they could not have been utilized for execution gas chambers.

Additionally, an evaluation of the crematory facilities produces conclusive evidence that contradicts the alleged volume of corpses cremated in the generally alleged time frame. It is, therefore, the best engineering opinion of the author that none of the facilities examined were ever utilized for the execution of human beings and that the crematories could never have supported the alleged work load attributed to them.

## METHODOLOGY

The procedures involved in the study and forensic analysis which resulted in the report were as follows:

1. A general background study of the available material.
2. An on-site inspection and forensic examination of the facilities in question which included the taking of physical data (measurements and construction information) and a considered removal of physical sample material (brick and mortar) which was returned to the United States for chemical analysis.
3. A consideration of recorded and visual (on-site) logistic data.

4. A compilation of the acquired data.
5. An analysis of the acquired information and comparison of this information with known and proven design, procedural and logistic information and requirements for the design, fabrication and operation of actual gas chambers and crematories.
6. A consideration of the chemical analysis of the materials acquired on site.
7. Conclusions based on the acquired evidence.

## USE OF HCN AND ZYKLON B AS A FUMIGANT



Zyklon B: A commonly used pesticide

Hydrogen cyanide gas (HCN or hydrocyanic acid) has been utilized as a fumigant since before WWI. It has been used side by side with steam and hot air and during WWII with D.D.T. by the United States and its Allies.

HCN is generally manufactured by a chemical reaction of sodium cyanide with dilute sulfuric acid. The chemical reaction results in HCN being given off into the air with a remainder of prussic acid (hydrocyanic acid). This reaction is normally contained in a ceramic crock pot.

This procedure has been utilized for pest and vermin control on ships, in buildings and in specially designed chambers and structures. Special design and handling considerations must be followed to ensure the safety of the users (technicians). Hydrogen cyanide is one of the most powerful and dangerous of all fumigation chemicals. Buildings especially constructed or modified for this purpose were used by all militaries and health organizations throughout the world. HCN has been used everywhere for disease control; specifically for plague and typhus i.e. rat, flea and lice control.

Special chambers were used since WWI in Europe and the United States. Some of these chambers were used by the German Army in Europe before and during WWII and much earlier by the United States Immigration Service at Ellis Island, New York Harbor. Many of these fumigation chambers were made for DEGESCH, a German firm located in Frankfurt am Main, Germany. During the war, DEGESCH supervised the distribution of Zyklon B. DEGESCH presently manufactures HCN.

Zyklon B was a special commercial preparation containing hydrocyanic acid. The name "Zyklon B" was itself a trade name. HCN was prepared at the factory and delivered in a form where the HCN was absorbed in a porous carrier, either wood

pulp or diatomaceous earth (chalk). It was supplied either in discoids or snippets or pellets. This preparation was sealed in an airtight can which required a special can opener. In this form the HCN - Zyklon B was much safer and easier to handle. The resultant Zyklon B gas was HCN.

The discoids, snippets or pellets had to be spread on the floor of the area to be fumigated or utilized in a chamber which circulated and heated the air within the chamber in excess of 78.3 degrees Fahrenheit (25.7 degrees Centigrade). If used in buildings, ships, or tents to fumigate trees and produce, the area must be heated to an excess of 78.3 degrees Fahrenheit temperature, the boiling point of HCN. Failure to do this will result in a much longer time to complete the fumigation. Fumigation takes a minimum of 24 to 48 hours.

After the fumigation, the ventilation of the area must take a minimum of ten hours, depending on the location (and volume), and longer if the building has no windows or exhaust fans. The fumigated area must then be chemically tested for the presence of gas before entering. Gas masks are sometimes used, but are not safe and should not be used for more than ten (10) minutes. A complete chemical suit must be worn to prevent skin poisoning. The warmer the temperature and the drier the location, the faster and safer the handling will be.

The specifications for the gas are found in Table 1:

Name:	HCN, hydrocyanic acid, prussic acid
Boiling point:	25.7°C/78.3°F at 760 mm Hg
Specific gravity:	0.69 at 15°C/64°F
Vapor density:	0.947 (air = 1)
Melting point:	-13.2°C/8.2°F
Vapor pressure:	750mm Hg at 25°C/77°F 1200mm Hg at 38°C/100°F
Solubility in water:	100%
Appearance:	clear
Color:	slightly bluish
Odor:	bitter almond, very mild, non-irritating (odor is not considered a safe method of determining presence of the poison)
<b>Hazards:</b>	
1. Unstable with heat, alkaline materials and water	
2. Will explode if mixed with 20% sulfuric acid.	
3. Polymerization (decomposition) will occur violently with heat, alkaline material or water. Once started, reaction is autocatalytic and uncontrollable. Will explode.	
4. Flash point: -18°C/0°F	
5. Autoignition temperature: 538°C/1000°F	
6. Flammable limits in air	
volume - %	
lower 6	
upper 41	
Source: Hydrogen Cyanide, Dupont Publication, 7-63	

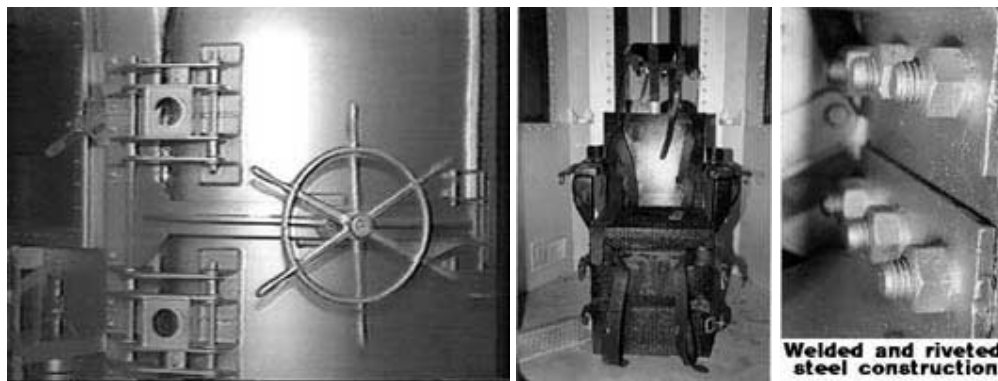
## DESIGN CRITERIA FOR A FUMIGATION FACILITY

A fumigation facility, whether a building or a chamber, must adhere to the same basic requirements. It must be sealable, heatable, have both circulation and exhaust capability for the air, must have a sufficiently high stack for the exhaust and a means for distribution of the gas evenly (likewise the Zyklon B material).



Execution Gas Chamber at the Mississippi State Penitentiary  
Note: High exhaust stack on Death House (left)

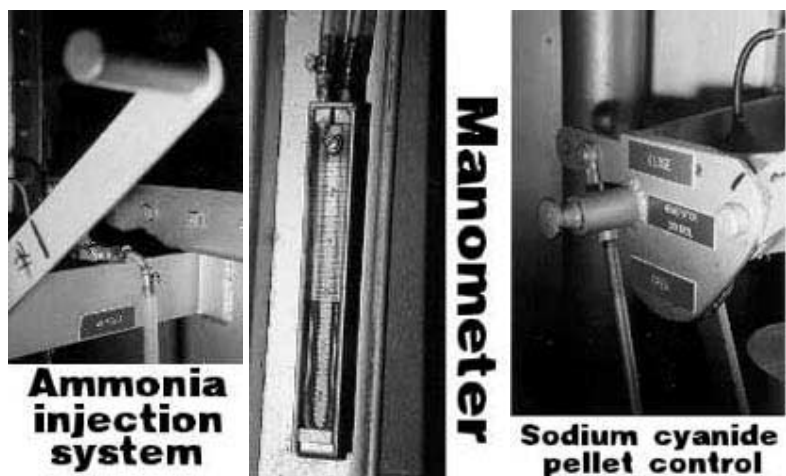
First, if a chamber is used today, it must be a welded and pressure tested vessel coated with an inert (epoxy) paint or stainless steel or plastic (PVC). The doors must be gasketed with an HCN resistant material (pickled asbestos, neoprene or Teflon®). If a building, it must be made of brick or stone and coated both inside and out with an inert (epoxy) paint or pitch, tar or asphalt. The doors and windows must be gasketed or sealed with a rubberized or pitched canvas and sealed with neoprene sealant or tar. In either case, the area must be extremely dry. The term 'sealing' has two meanings: first, to mechanically prevent leakage from the facility; and second, to render the exposed, porous surfaces of the facility impervious to impregnation by Zyklon B gas.



Gas Chamber at the Mississippi State Penitentiary

Second, the chamber or structure must have a gas generator or distribution system for Zyklon B which would force hot air over the Zyklon B or the generator (generator may be heated with water if sealed) and circulate the warm air and gas. The mixture required for fumigation is 3200 parts per million (ppm) or 0.32% total volume HCN.

The chamber must be free of obstructions and have a capability for a strong, constant and copious air flow.



Controls used by United States Gas Chambers

Third, the chamber or structure must have a means for evacuating the poisonous air/gas mixture and replacing it with fresh air. Generally, this is done with an exhaust or intake fan with either exhaust or intake valves or louvered ports of sufficient size to allow reasonable air change per hour. Usually, a sufficient cubic feet per minute (cfm) fan and intake and exhaust aperture should permit a complete air change in 1/2 hour and should be run for at least twice the required time of one hour, or two hours. The larger the facility, the less practical this becomes (due to the size of available fans) and exhaust times may take several hours or longer.

The exhaust must be vented at a safe distance above the facility where the air currents can disperse the gas. This is normally 40 feet above the structure, but it should be more if the structure is sheltered from the wind. If an incinerator is used, the stack may be only several feet in height. It is generally too costly to incinerate the HCN because of the air volume it must handle in a short time period.

The temperature of the walls and the air within the facility, and the intake air, must be kept at least 10 degrees above the boiling point of the hydrocyanic acid (78.3 degrees F) to prevent condensation of HCN on the walls, floor and ceiling of the facility, as well as in the exhaust system. If the temperature is below 79 degrees F and condensation occurs, the facility must be decontaminated with chlorine bleach or ammonia, the former being the most effective. This is accomplished by spraying the walls either automatically or manually. If done manually, protective suits (generally neoprene) must be worn and the technicians must utilize air breathing cylinders, as gas masks are unsafe and dangerous. The interior of the building must be evacuated longer to allow the chlorine bleach vapors to neutralize the liquid HCN in the exhaust system. The interior of the building must be washed with water and thoroughly mopped and dried before the next use.

Additionally, a check of the air inside the building must be done to determine whether all of the HCN has been removed. The test may be either by gas detector or by the copper acetate/benzidine test. In the former, an electronic readout is provided with



detection to 10 ppm. In the other, a benzidine solution is mixed with a copper acetate solution and is used to moisten a piece of test paper which turn blue in varying degrees if HCN is present

## DESIGN CRITERIA FOR AN EXECUTION GAS CHAMBER

Many of the same requirements for the fumigation facility apply to an execution facility. Generally, however, the execution facility will be smaller and more efficient. Zyklon B is not recommended for use in an execution gas chamber generally because of the time it takes to drive the gas from the inert carrier. Up until now, the only efficient method has been to generate the gas on-site by chemical reaction of sodium cyanide and 18% sulfuric acid. Recently, a design for a gas generator has been completed which will be utilized in the two (2) man gas chamber at the Missouri State Penitentiary, Jefferson City, Missouri. The author is the design consultant for this execution gas chamber.

This generator employs an electrically heated water jacket to pre-boil HCN in a cylindrical vessel. At the time of use, the HCN is already vaporized and is released through valves into the chamber. A nitrogen burst system clears the plumbing after use. The total time of the execution is less than four minutes. The chamber is evacuated at a rate of once every two minutes for a 15 minute time period, providing some seven (7) complete air changes.

The chamber may be of welded steel construction or of plastic PVC. The doors and windows should be of standard marine watertight construction. The door is gasketed with a single handle pressure seal. All lighting and electrical hardware is explosion-proof. The chamber contains the gas distribution plumbing, the gas generator with the bottle of liquid HCN, electronic heart monitoring equipment, two (2) seats for the condemned and a gas detector reading externally, electronically to 10 ppm.

Because the chamber contains so lethal a gas, it is operated at a negative pressure to guarantee that any leak would be inward. The chamber pressure is controlled by a vacurizer system which should hold the chamber at a partial vacuum of 10 pounds per square inch (psi) (operational: 8 psi plus 2 psi of HCN). The negative pressure is maintained utilizing the outward ambient as a standard. This system is controlled electrically and supported by a 17.7 cfm displacement vacuum pump. Additionally, a pressure switch is set to trigger emergency systems if the chamber pressure reaches 12 psi, 3 psi above the operational limit.

The inlet and exhaust system is designed for an air change every two (2) minutes. The air is supplied by a 2000+ cfm fan on the inlet side of the chamber and exhausted through the top of the chamber. The inlet and exhaust valves are both of the inwardly closing type to prevent vacuum loss and are timed to electrically open in sequence, the exhaust valve first. This is evacuated through a 40 foot high 13 inch diameter PVC pipe where the wind disperses the gas harmlessly. The intake air should have preheat capability to guarantee that no HCN will condense and thereby escape evacuation.

Gas detectors are utilized for safety. First, in the chamber where it will electrically prohibit the door from opening until the chamber is safe, second, outside the chamber in the witness and personnel areas where they sound alarms and initiate an air exhaust

and intake system to protect the witnesses, as well as, abort the execution and evacuate the chamber. The safety systems contain warning bells, horns, and lights, as well.

Further, emergency breathing apparatus (air tanks) is available in the chamber area, as well as, special HCN first aid kits, emergency medical equipment for HCN and a resuscitator in an adjacent area for medical personnel.

Execution gas chamber design requires the consideration of many complicated problems. A mistake in any area may, and probably will, cause death or injury to witnesses or technicians.

## UNITED STATES EXECUTION GAS CHAMBERS SINCE 1920

The first gas chamber for execution purposes was built in Arizona in 1920. It consisted of an airtight chamber with gasketed doors and windows, a gas generator, an explosion proof electrical system, an air intake and exhaust system, provision for adding ammonia to the intake air and mechanical means for activating the gas generator and air exhaust. The air intake consisted of several mechanically operated valves. Only the hardware has changed to the present.

The gas generator consisted of a crockery pot filled with a dilute solution (18%) of sulfuric acid with a mechanical release lever. The chamber had to be scrubbed with ammonia after the execution, as did the executee. Some 25 13-gram sodium cyanide pellets were used and generated a concentration of 3200 ppm in a 600 cubic foot chamber.

In the years that followed, other states adopted the HCN gas chamber as a mode of execution and design techniques changed. Eaton Metal Products designed, built and improved most of the chambers. Most had two chairs and were fitted with a vacuum system to guarantee a negative pressure and only inward leakage. All systems employed the gas generator technique because it was the most effective and simplest procedure available up until the late 1960's. No system ever was designed to use, or ever used, Zyklon B.

The reason for this is quite simple. Zyklon B takes too long to evaporate (or boil off) the HCN from the inert carrier and requires heated air and a temperature controlled system. Not only is the gas not instant, but a danger of explosion always exists.

The overall gas mixture is generally below the lower explosion limit (LEL) of the gas air mixture of 0.32% (since the mixture should not normally exceed 3200 ppm), but the concentration of the gas at the generator (or as in the case of Zyklon B, at the inert carrier) is much greater and may well be 90% to 99% by volume. This is almost pure HCN and this condition may exist at points of time in pockets in the chamber. The ambient air temperature or the heated air temperature must be considerably higher and artificially controlled for Zyklon B (since evaporation is strictly a physical process), where, with the gas generator, the temperature can be lower and uncontrolled since the chemical reaction in the generator is self-catalytic after starting. Electrical contacts and switches must be kept at a minimum, explosion-proof and outside the chamber. Technology available only since the late 1960's has enabled the Missouri system, which will be the most advanced system ever built, to utilize a gas vaporizer and

delivery system for liquid HCN, eliminating the dangerous of handling and disposal of the prussic acid residual after the execution.

Zyklon B, which would seem on the surface to have been a more efficient means of supplying gas and eliminating the prussic acid residue problem, was not the solution to the problem. In fact, the use of Zyklon B would have increased the execution time and therefore lengthened the time for handling the dangerous gas and, also, because of the heater requirements, caused a risk of explosion. An alternate solution would have been to heat the gas externally and circulate the gas/air mixture through plumbing outside the chamber and back into the chamber as the DEGESCH delousing equipment did, but this would only have caused a greater risk of leakage and hazard to the users. It is poor design and extremely dangerous to allow the gas outside the pressurized chamber. The DEGESCH equipment was intended to be utilized in the open, or in a well-ventilated area, and only in the presence of trained personnel and not with untrained people present.

In the United States, Arizona, California, Colorado, Maryland, Mississippi, Missouri, Nevada, New Mexico, and North Carolina have utilized gas as a mode of execution. But because of the inherent dangers in handling the gas and the expensive maintenance costs for the equipment used, some states (Nevada, North Carolina and New Mexico) have legislated for lethal injection, either as the only, or as a choice procedure. Other states will probably follow. The author has been a consultant to the states of Missouri, California and North Carolina.

In any event, because of the cost of manufacture of HCN gas, and because of the excessive hardware and maintenance costs of the equipment, gas has been in the past, and still is, the most expensive mode of execution.

## TOXIC EFFECTS OF HCN GAS

Medical tests show that a concentration of hydrogen cyanide gas in an amount of 300 ppm in air is rapidly fatal. Generally, for execution purposes a concentration of 3200 ppm is used to ensure rapid death. This is a weight/volume of some 120 to 150 grams/2 cubic feet of gas, depending on temperature and pressure. Some 100 ppm of HCN is fatal within half an hour. Toxic effects are skin irritation and rashes, eye irritation, blurring of vision and permanent eye damage; non-specific nausea; headache; dizziness; vomiting and weakness; rapid respiration, lowered blood pressure, unconsciousness, convulsions and death; symptoms of asphyxia, dyspnea, ataxia, tremors, coma and death through a disruption of the oxidative metabolism.

Hydrocyanic acid does not have to be breathed to be fatal. In concentrations of over 50 ppm, the user must wear a chemical suit to completely protect his body and breathe bottled air. Gas masks are generally ineffective and should never be utilized. Specialized first aid kits and medical supplies are available and should be present in all areas where a person may contact the gas.

## A BRIEF HISTORY OF THE ALLEGED GERMAN EXECUTION GAS CHAMBERS

Based on material available to the author, it has been determined that the Germans allegedly constructed a series of large (three or more executees) gas chambers for execution purposes beginning sometime in late 1941 and utilized them until late 1944.

Beginning with the first alleged gassing in a basement at Auschwitz I, two converted farmhouses at Birkenau (Auschwitz II) known as the Red and White houses or Bunkers 1 and 2, Krema I at Auschwitz, Kremas II, III, IV and V at Birkenau and an experimental facility at Majdanek, these facilities allegedly utilized hydrocyanic acid in the form of Zyklon B as the gas. Majdanek allegedly also used carbon monoxide (CO).

According to official literature obtained at the Auschwitz and Majdanek State Museums, these execution facilities were located in concentration camps constructed in highly industrial areas and their inmates supplied forced labor to the factories producing materials for the war effort. These facilities also included crematories for the disposal of the remains of those allegedly executed.

Additionally, other alleged facilities which only utilized CO as the execution gas were located at Belzec, Sobibor, Treblinka and Chelmno (gas vans). These additional facilities were allegedly destroyed either during or after WWII, have not been inspected and are not directly the subject of this report.

Carbon monoxide (CO) gas, however, will be considered briefly at this point. CO gas is a relatively poor execution gas in that it takes much too long to effect death, perhaps as long as 30 minutes, and if poorly circulated, longer. In order to utilize CO, a quantity of 4,000 ppm would be required making it necessary to pressurize the chamber at approximately 2.5 atmospheres with CO. Additionally, CO<sub>2</sub> (carbon dioxide) has also been suggested. CO<sub>2</sub> is even less effective than CO. These gasses, it has been alleged, were produced by diesel engines. Diesel engines produce exhausts which contain very little carbon monoxide and would require that the execution chamber be pressurized with the air/gas mixture in order to have sufficient gas to cause death. Carbon monoxide in quantities of 3000 ppm or 0.30% will cause nausea and headache after exposure for one hour and perhaps some long term damage.

Concentrations of some 4000 ppm and above will prove fatal for exposure times of over 1 hour. The author would submit that a chamber filled to capacity with persons occupying approximately 9 square feet or less (the minimum area required to ensure gas circulation around the occupants), that the occupants would die of suffocation due to their own exhaustion of the available air, well before the additional gas would take effect. Thus, simply closing the executees in this confined space would obviate the need of either CO or CO<sub>2</sub> from an external source.

The alleged execution facilities in Auschwitz I (Krema I), and Majdanek still exist, in allegedly original form. In Birkenau, Kremas II, III, IV and V are collapsed or razed to the foundations; Bunker I (the Red House) is gone and Bunker II (the White House) is now restored and utilized as a private residence. At Majdanek, the first oil-

fired crematory has been removed and the crematory with the alleged gas chamber has been rebuilt with only the ovens being original.

Krema I at Auschwitz, Kremas II, III, IV and V at Birkenau, and the existing crematory at Majdanek were allegedly crematories and gas chambers combined. The Red and White houses at Birkenau were allegedly only gas chambers. At Majdanek, the experimental gas chambers were not adjacent to a crematory and there was a separate crematory which is not now extant.

## DESIGN AND PROCEDURES AT THE ALLEGED EXECUTION GAS CHAMBERS

It appears, through investigation of the available historical documents and the facilities themselves, that most of the alleged execution gas chambers were converted from an earlier design, purpose and structure. This is true except for the so-called experimental chambers at Majdanek, which were allegedly specifically built as gassing facilities.

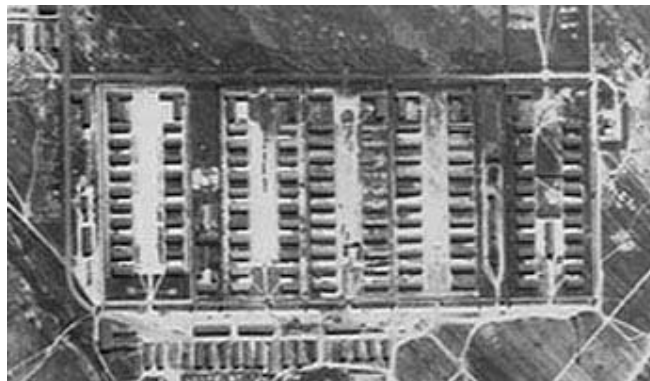


Aerial view of Auschwitz I camp along the Sola river

Bunkers I and II are described in Auschwitz State Museum literature as converted farm houses with several chambers and windows sealed. These do not exist in their original condition and were not inspected. Kremas I, II, III, IV and V are described historically and on inspection were verified to have been converted mortuaries or morgues connected and housed in the same facility as crematories. The on-site inspection of these structures indicated extremely poor and dangerous design for these facilities if they were to have served as execution gas chambers. There is no provision for gasketed doors, windows or vents; the structures are not coated with tar or other sealant to prevent leakage or absorption of the gas. The adjacent crematories are a potential danger of explosion.

The exposed porous brick and mortar would accumulate the HCN and make these facilities dangerous to humans for several years. Krema I is adjacent to the S.S. Hospital at Auschwitz and has floor drains connected to the main sewer of the camp -- which would allow gas into every building at the facility. There were no exhaust systems to vent the gas after usage and no heaters or dispersal mechanisms for the Zyklon B to be introduced or evaporated. The Zyklon B was supposedly dropped through roof vents and put in through windows -- not allowing for even distribution of gas or pellets. The facilities are always damp and not heated. As stated earlier, dampness and Zyklon B are not compatible.

The chambers are too small to physically contain the occupants claimed and the doors all open inward, a situation which would inhibit removal of the bodies. With the chambers fully packed with occupants, there would be no circulation of the HCN within the room. Additionally, if the gas eventually did fill the chamber over a lengthy time period, those throwing Zyklon B in the roof vents and verifying the death of the occupants would die themselves from exposure to HCN. None of the alleged gas chambers were constructed in accordance with the design for delousing chambers which were effectively operating for years in a safe manner. None of these chambers were constructed in accordance with the known and proven designs of facilities operational in the United States at that time. It seems unusual that the presumed designers of these alleged gas chambers never consulted or considered the United States technology; the only country then executing prisoners with gas.



View of Majdanek

The facilities at Majdanek are likewise incapable of fulfilling the alleged purpose. First, there is a rebuilt crematory with an alleged gas chamber. The only portions of the building which existed prior to the rebuilding were the cremation ovens. Allegedly, the building was reconstructed from plans which do not exist. The facility is built in such a manner that gas could not have been contained within the alleged chamber, the chamber itself is too small to have accommodated the volume of victims attributed to it. The building is too damp and cold to utilize Zyklon B gas effectively. The gas would have reached the ovens, and after killing all the technicians, would have caused an explosion and destroyed the building. Further, the construction, poured concrete, is radically different from the other buildings at the facility. In short, the building could not be used for its alleged purpose and fails to follow even minimal gas chamber design.

The second facility at Majdanek is shown on maps to be a U-shaped building and is now, in reality, two separate buildings. This complex is designated Bath and Disinfection Building 1 and 2. One of the buildings is strictly a delousing facility and is designed as were the other accepted delousing facilities at Birkenau. The second building of the complex is somewhat different. The front portion of the building contains a shower room and an alleged gas chamber. The existence of blue stains in this room is consistent with the blue stains found in the Birkenau delousing facility. This room has two roof vents which were for venting the room after a delousing procedure. The Zyklon B would have been placed by hand on the floor. This chamber is clearly not an execution chamber. It has provision for air circulation but no stack for venting.

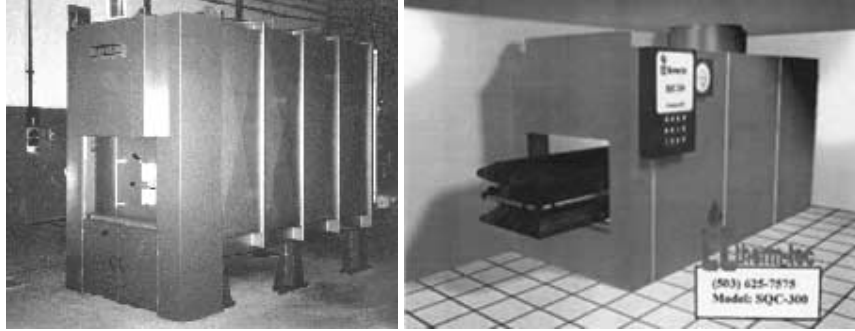
It, like the other facilities, is not designed for, or capable of being used as, an execution gas chamber. In the back of this building are the experimental gas chambers. This area includes a breezeway, control booth and two chambers allegedly used as gas chambers. A third room was sealed and not available for inspection. These chambers are unique in that both have piping for allegedly using carbon monoxide gas controlled from the booth. One of the chambers has a potential vent in the ceiling that was apparently never cut through the roof. The other chamber has a heating circulatory system for moving heated air into the chamber. This circulatory system is ineffectively designed and constructed with the intake and outlet too close together to function properly and has no provision for a vent. Remarkable about both chambers is what appears to be a rabbet or groove cut into the four (4) steel doors, which is consistent with the placement of a gasket. Purportedly, both chambers were used for Zyklon B or carbon monoxide. This cannot be true.

Of the two chambers, one was not completed and never could have been used for carbon monoxide. It is also not designed for HCN, even though it allegedly was utilized for this purpose. The larger chamber was not designed for HCN. Notwithstanding the sign at the door saying "experimental," this chamber would have been incapable of providing execution by CO because of the need to produce 4,000 ppm (the lethal concentration) at the required 2.5 atmospheres of pressure. Both chambers failed to meet the design requirements for venting, heating and circulating, and leakage. Nowhere were the bricks, stucco and mortar ever coated with a sealant, inside or out.

A most remarkable characteristic of this complex is that these chambers were surrounded on three sides by a depressed concrete walkway. This is totally inconsistent with intelligent gas handling design in that gas seepage would accumulate in this trench and, being sheltered from the wind, would not dissipate. This would make the entire area a death trap, especially with HCN.

The author must therefore conclude that this facility was never intended for even the limited use of HCN gas.

## CREMATORIES



Above: Modern Crematories

Below: Crematory buildings in Dachau, Germany



A consideration of crematories, both old and new, must be made to determine the functionality of the German Kremas at accomplishing their attributed tasks.

Cremation of the dead is not a new concept. It has been practiced by many cultures for many centuries. Although practiced several thousand years ago, it was frowned upon by the Catholic Church and not practiced recently until the Church relaxed its opposition in the later part of the 18th century.

Cremation was forbidden by Orthodox Judaism. By the early 1800's Europe was again practicing cremation on a limited basis. It becomes advantageous to control disease, free up much needed land in crowded areas and eliminate the need for storing corpses in winter when the ground is frozen. Europe's early crematories were coal or coke fired furnaces.

The oven or furnace which is used to cremate corpses is properly termed a retort. Early retorts were merely ovens which cooked all the moisture out of the corpse and reduced it to ash. Bones cannot be burned and must be pulverized, even today. The early mortar and pestle has been replaced by a crushing machine, however. Modern retorts are mostly gas fired, although some are still supplied for oil. None are still fired by coke or coal in the United States or Canada.

Earlier retorts were simply a drying or baking kiln and simply dried the human remains. Modern retorts of brick-lined steel actually blow fire from a nozzle onto the remains setting them afire, causing combustion and rapid burning. Modern retorts also have a second or afterburner for reburning all the pollutants in the combusted gaseous



material. This second burner is a requirement set by the various state agencies responsible for air pollution. It should be noted that the human remains are not responsible for the pollution. It is caused entirely by the fossil fuels used. An electric retort, although cost prohibitive to run, would have no pollutants.

These modern retorts or crematories burn at a temperature of 2000+ degrees Fahrenheit, with an afterburner temperature of 1600 degrees Fahrenheit. This high temperature causes the body to combust and consume itself, allowing for the burner to be shut down. Wooden caskets and paper boxes are burned with the body, today, although not in the past, with no added time of burning due to the high temperature. Some European units are operated at a traditional lower temperature of 800 degrees Centigrade (1472 degrees Fahrenheit) and for a longer time period.

At 2000 degrees Fahrenheit or more with a 2500 cfm blowered air supply from the outside, modern retorts will cremate one corpse in 1.25 hours. Theoretically, this is 19.2 in a 24 hour time period. Factory recommendation for normal operation and sustained use allows for three (3) or less cremations per day. Older, oil, coal and coke furnaces with forced air (but no direct flame application) normally took 3.5 to 4 hours for each corpse.

Theoretically, this could allow for 6.8 corpses in a 24 hour period at a maximum. Normal operation permits a maximum of three (3) cremations in a 24 hour time period. These computations are based on 1 corpse per retort per cremation. These modern retorts are of all steel construction and lined with high quality refractory brick. The fuel is pumped directly to the retort and all controls are electric and automatic. The coal and coke fired furnaces did not burn at an even temperature (approximately 1600 degrees Fahrenheit max.) and had to be constantly fed fuel by hand and dampered up and down. Since there was no direct application of flame to the corpse, the blower only fanned the flames and increased the temperature of the kiln. This crude mode of operation probably produced an average temperature of about 1400 degrees Fahrenheit.

The crematories utilized at the inspected German facilities were of the older type. They were constructed of red brick and mortar and lined with a refractory brick. All of the ovens had multiple retorts, some were blowered (although none had direct combustion), none had afterburners and all were coke fired except one facility no longer in existence at Majdanek. None of the retorts inspected and examined at all of the locations were designed for multiple corpse incineration. It should be noted that unless specifically designed for a greater bone to flesh to heat ratio, the retort will not consume the materials placed within it. Theoretical and real-time estimated maximum 24 hour outputs, based on one (1) corpse per retort per cremation are found in Table II:

Table 3  
(Theoretical and Real-time Estimated Maximum 24 Hour  
Crematory Output)

		Theoretical	Real-time
Krema I:	3 furnaces, 2 retorts each		
	6 retorts x 6.8 corpses	40.8	
	6 retorts x 3 corpses		18
Krema II:	5 furnaces, 3 retorts each		
	15 retorts x 6.8 corpses	102.0	
	15 retorts x 3 corpses		45
Krema III:	5 furnaces, 3 retorts each		
	15 retorts x 6.8 corpses	102.0	
	15 retorts x 3 corpses		45
Krema IV:	2 furnaces, 4 retorts each		
	8 retorts x 6.8 corpses	54.4	
	8 retorts x 3 corpses		24
Krema V:	2 furnaces, 4 retorts each		
	8 retorts x 6.8 corpses	54.4	
	8 retorts x 3 corpses		24
Majdanek I:	2 furnaces, 1 retort each		
	2 retorts x 6.8 corpses	13.6	
	2 retorts x 3 corpses		6
Majdanek 2:	5 furnaces, 3 retorts each		
	15 retorts x 6.8 corpses	102.0	
	15 retorts x 3 corpses		45

**Click to Enlarge**

## FORENSIC CONSIDERATIONS OF HCN, CYANO-COMPOUNDS AND CREMATORIES

As stated earlier, forensic samples of brick, mortar, concrete and sediment were selectively taken from sites in Poland. Cyanide and cyanide compounds may remain in a given location for long periods of time and if they do not react with other chemicals, may migrate around in brick and mortar.



Fred Leuchter taking samples from the alleged "Gas Chambers" in  
Auschwitz

Thirty-one samples were selectively removed from the alleged gas chambers at Kremas I, II, III, IV and V. A control sample was taken from delousing facility #1 at Birkenau. The control sample was removed from a delousing chamber in a location where cyanide was known to have been used and was apparently present as blue staining. Chemical testing of the control sample #32 showed a cyanide content of 1050 mg/kg, a very heavy concentration. The conditions at areas from which these samples were taken are identical with those of the control sample, cold, dark and wet. Only Kremas IV and V differed, in the respect that these locations had sunlight (the buildings have been torn down) and sunlight may hasten the destruction of uncomplexed cyanide. The cyanide combines with the iron in the mortar and brick and becomes ferric-ferro-cyanide or prussian blue pigment, a very stable iron-cyanide complex.

Table III  
(Locations of Analyzed Samples)

**Auschwitz I:**  
Krema I - samples #25 through #31.

**Birkenau (Auschwitz II):**  
Krema II - samples #1 through #7;  
Krema III - samples #8 through #11;  
Krema IV - samples #13 through #20;  
Krema V - samples #21 through #24;

Sample #12 is a gasket sample from the Sauna at Birkenau.

Sample #32 is the Control Sample obtained from Delousing Facility #1, Birkenau

no longer hydrogen cyanide.

The locations from which the analyzed samples were removed are set out in Table III.

It is notable that almost all the samples were negative and that the few that were positive were very close to the detection level (1 mg/kg); 6.7 mg/kg at Krema III; 79 mg/kg at Krema I. The absence of any consequential readings at any of the tested locations as compared with the control sample reading 1050 mg/kg supports the evidence that these facilities were not execution gas chambers. The small quantities detected would indicate that at some point these buildings were deloused with Zyklon B -- as were all the buildings at all these facilities. Additionally, the areas of blue staining show a high iron content, indicating ferric-ferro-cyanide,

One would have expected higher cyanide detection in the samples taken from the alleged gas chambers (because of the greater amount of gas allegedly utilized there) than that found in the control sample. Since the contrary is true, one must conclude that these facilities were not execution gas chambers, when coupled with all the other evidence gained on inspection.

Evidence as to Krema function is non-existent since Krema I's oven has been completely rebuilt, Kremas II and III are partially destroyed, with components missing and Kremas IV and V are gone. At Majdanek, one Krema is completely gone and the second Krema has been rebuilt, except for the ovens. Visual inspection of the memorial ash heap at Majdanek shows ash of a strange color, beige. Actual human-

remains ash (as per the author's own investigations) is oyster gray. There may be some sand in the mixture at the memorial at Majdanek. Additionally, the author will discuss the alleged burning (cremation) pits in this section.



Right: Alleged burning pits in Birkenau. Note this picture is supposedly taken from inside the alleged Gas Chamber. Strange the photographer would not spin around and take a picture of the Gas Chamber. Up to now, there is no actual WWII era picture of it.

The author personally inspected and photographed the burning pits at Birkenau. Most remarkable about those pits is a high water table -- perhaps as high as 1.5 feet from the surface. The historical description of these pits is that they were 6 meters (19.55 feet) deep. It is not possible to burn corpses under water, even with the use of an artificial accelerant (gasoline). All pit locations officially designated on museum maps were inspected and as anticipated, since Birkenau was constructed on a swamp, all locations had water within 2 feet of the surface. It is the opinion of this author that no burning pits existed at Birkenau.

## AUSCHWITZ, KREMA I

A detailed study of the officially alleged execution gas chamber at Krema I and a detailed analysis of the existing blueprints acquired from the museum officials indicates that the alleged gas chamber was, at the time of the alleged gassings, a morgue and later an air raid shelter. The drawing supplied by the author of this report of Krema I has been reconstructed for the time period from September 25, 1941 through



September 21, 1944. It shows a morgue of some 7680 cu. ft. with two doorways, neither door opening externally. One doorway opened into the crematory and the other into the washroom. Apparently neither opening had a door, but this was not verifiable since one wall had been removed and one opening had been moved. It should be noted that the official Auschwitz State Museum guidebook says that the building physically remains in the same condition as it was on liberation day on January 27, 1945.



**ABOVE: Roof on  
Krema 1, 4 roof  
vents allegedly  
used to throw in  
Zyklon B  
LEFT: Close up  
of roof vents**

There are 4 roof vents and 1 heater flue in the morgue area. The flue is open, showing no evidence of ever having been closed. The roof vents were not gasketed and new wood indicated they had recently been rebuilt. The walls and ceiling are stucco and the floor is poured concrete. The floor area is 844 sq. ft. The ceiling is beamed and on the floor one can see where the air raid shelter walls were removed. The lighting was not, and is not now, explosion-proof. There are floor drains in the floor of the

chamber which connect into the main camp drain and sewer system. Assuming a 9 sq. ft. area per person to allow for gas circulation, which is nevertheless very tight, a maximum of 94 people could fit into this room at one time. It has been reported that this room could hold up to 600 persons.

The alleged execution gas chamber is, as stated earlier, not designed to be used in such a manner. There is no evidence of an exhaust system or fan of any type in this structure. The venting system for the alleged gas chamber consisted simply of four (4) square roof vents exhausting less than two (2) feet from the surface of the roof.

Ventilating HCN gas in this manner would undoubtedly result in the poison gas reaching the confines of the SS hospital a short distance across the road, with patients and support personnel being killed. Because of the fact that the building has no sealant to prevent leakage, no gasketed doors to prevent gas reaching the crematory, drains that would permit gas to reach every building in the camp, no heating system, no circulatory system, no exhaust system or venting stack, no gas distribution system, constant dampness, no circulation due to the number of people in the chamber, and no way of satisfactorily introducing the Zyklon B material, it would be sheer suicide to attempt to utilize this morgue as an execution gas chamber. The results would be an explosion, or leaks gassing the entire camp.

Further, if the chamber were used thus, (based on DEGESCH figures of 4 oz. or 0.25 lbs. per 100 cu. ft.), 30.4 oz. or 1.9 lbs. of Zyklon B gas (gross weight of Zyklon B is three times that of Zyklon B gas; all figures are for Zyklon b gas only) would be used each time for 16 hours at 41 degrees Fahrenheit (based on German government fumigation figures). Ventilation must take at least 20 hours and tests must be made to determine if the chamber is safe. It is doubtful whether the gas would clear in a week without an exhaust system. This clearly is contradictory of the chamber's alleged usage of several gassings per day.

Computed theoretical and real-time usage rates of Krema I and alleged execution gas chamber at maximum capacity are set out in Table IV.

Table IV (Hypothetical Execution and Crematory Usage Rates of Krema I)	
Execution rate	94 people/week (hypothetical)
Cremation rate	286 people/week (theoretical) 126 people/week (real-time)

## BIRKENAU – KREMAS II, III, IV AND V



Air photo of Birkenau taken May 31st, 1944.

A detailed study of these Kremas resulted in the following information.

Kremas II and III were mirror image installations consisting of several morgues and a crematory of 15 retorts each. The morgues were in the basement and the crematories on the ground floor. An elevator was utilized for corpse transport from the morgues to the crematory. The included drawings were generated from original blueprints obtained at the Auschwitz State Museum and observations made and measurements taken on location. Construction was of brick, mortar and concrete.



The investigated areas were the alleged gas chambers designated as morgue #1 on both drawings. As noted for Krema I, there was no ventilation, no heating system, no circulation system, no sealant inside or out and further, no doors on the morgues in Krema II. The area has been examined by the author and no evidence of doors or door frames has been found. This investigator could not make this determination for

Krema III since portions of the structure are missing. Both structures had roofs of reinforced concrete without any apparent openings. Further, reports of hollow gas-carrying columns are not true. All the columns are solid, reinforced concrete exactly as indicated in the captured German plans. The roof vents are not gasketed. These facilities would be very dangerous if used as gas chambers and this use would probably result in the death of the users and an explosion when the gas reached the crematory. Each facility had a corpse elevator of 2.1 meters x 1.35 meters. Clearly, this elevator was large enough for only one (1) body and an attendant.

The alleged gas chamber in each of Kremas II and III had an area of 2500 sq. ft. This would accommodate 278 people based on the 9 square foot theory. If the chamber were filled with the required HCN gas (0.25 lbs./1000 cu. ft.) and assuming a ceiling height of 8 feet and 20,000 cubic feet of space, then 5 lbs. of Zyklon B gas would be required. Again, assume at least one week to vent (as at Krema I). This ventilation time is again doubtful, but will serve to compute our numbers.

**Table V**  
**(Hypothetical Execution and Crematory Usage Rates for Kremas II and III)**

---

<b>Krema II</b>	
Execution Rate	
278 people/week (hypothetical)	
Crematory Rate	
714 people/week (theoretical)	
315 people/week (real-time)	
<b>Krema III</b>	
Execution Rate	
278 people/week (hypothetical)	
Crematory Rate	
714 people/week (theoretical)	
315 people/week (real-time)	

Computed usage rates for Kremas II and III (theoretical and real-time) and alleged execution gas chamber at maximum capacity are set out in Table V.

Kremas IV and V were mirror image installations consisting of crematories of two furnaces with 4 retorts each and numerous rooms utilized as mortuaries, offices and storage. The interior rooms did not conform to the mirror image. Some of these rooms were allegedly used as gas chambers. It is impossible [to conclude much from the current layout since] the buildings were razed long ago. No sealant was found anywhere on the foundation or floor. According to reports,

Zyklon B gas pellets were allegedly thrown through wall ports which are now non-existent. If the plans of the building are correct, these facilities likewise were not gas chambers, for the same reasons iterated earlier for Kremas I, II, and III. Construction was apparently red brick and mortar with a concrete floor and no basement. It should be noted that the existence of cremation and execution facilities at Kremas IV and V is unsubstantiated.

Based upon statistics, obtained from the Auschwitz State Museum and measurements made at the site, for Kremas IV and V relative to the alleged gas areas, and assuming a ceiling height of 8 feet, the computed statistics are as follows:

#### KREMA IV

1875 sq. ft.; will hold 209 people. 15,000 cu. ft. will use 3.75 lbs. of Zyklon B gas at 0.25 lbs./1000 cu. ft.

#### KREMA V

5125 sq. ft.; will hold 570 people. 41,000 cu. ft. will use 10.25 lbs. of Zyklon B gas at 0.25 lbs./1000 cu. ft.

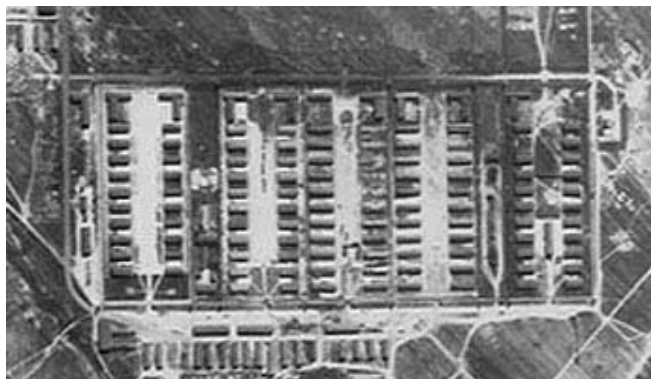
Computed alleged usage rates for Kremas IV and V (theoretical and real-time) and gas chamber at maximum capacity and 1 week ventilation time are set out in Table VI

<b>Krema IV</b>
Execution rate
209 people/week (hypothetical)
Crematory rate
385 people/week (theoretical)
168 people/week (real-time)
<b>Krema V</b>
Execution rate
570 people/week (hypothetical)
Crematory rate
385 people/week (theoretical)
168 people/week (real-time)

The Red and White houses, otherwise designated as Bunker I and II, were alleged to be gas chambers only, and there are no estimates available or statistics on the buildings.



## MAJDANEK



At Majdanek, there are several facilities of interest: the original crematory, now removed; the crematory with the alleged execution gas chamber, now rebuilt; the Bath and Disinfection Building #2, which was apparently a delousing facility; and Bath and Disinfection Building #1, which contained a shower, delousing and storage room and the alleged experimental CO and HCN gas chambers.



Outside view of the Majdanek camp

The first free standing crematory, which has been removed, has been discussed earlier. For Bath and Disinfection #2, although closed, an inspection through the windows confirms its function was only a delousing facility, similar to those at Birkenau. The rebuilt crematory and alleged gas chamber, although discussed earlier, will be considered briefly, again. The furnaces are the only portion of the original facility which has not been rebuilt. The basic structure appears to be of wood, as are the other facilities at Majdanek (except for the experimental chambers). However, closer inspection reveals that much of the building is of reinforced concrete, totally inconsistent with the remaining portions of the camp. The alleged execution gas chamber is adjacent to the crematory with apparently no means of containing the HCN gas.



Crematorium at Majdanek

The building is not sealed and would be inoperable for its alleged purpose. Allegedly rebuilt from an original plan, which does not exist, it physically appears to be nothing more than a crematory with several morgues. It is by far the smallest and most insignificant alleged gas chamber of all.

The delousing/storage area at Bath and Disinfection #1 is an L-shaped room with an internal wooden partition and door. It comprises some 7657 cu. ft. of volume and has an area of 806 sq. ft. It has stuccoed walls, beam construction and two ungasketed roof vents. It contains an air circulatory system which is improperly designed whereby the inlet and outlet are in close proximity to each other. Blue staining, apparently caused by ferric-ferro-cyanide pigment, visibly coats the surface of the walls. It would appear from design that this was a delousing room or storage room for deloused materials. The roof vents are only capable of providing long term airing of stored materials. The doors are not gasketed and are not designed to be tight. The room is not sealed inside or out with sealant. There were several areas in this building that were permanently sealed and not available for the author's inspection. This room, clearly, was not an execution chamber and meets none of the described criteria. See drawing.



Alleged "Gas Chamber" at Majdanek

If this were utilized as a presumed execution chamber, it would hold 90 people, at most, and require 2.0 lbs. of Zyklon B gas. Venting time should be at least one week. Maximum usage execution rate -- 90 people/week.

The alleged experimental gas chambers, located at Bath and Disinfection Building #1, are a brick building connected to the main facility by a loose wood structure. This

building is surrounded on three sides by a depressed concrete walkway. There are two chambers, an unknown area and a control booth, which has two steel cylinders, allegedly having contained carbon monoxide, which are piped into the two chambers. There are four steel doors with a rabbet, presumably for a gasket. The doors open out and are fastened shut with two mechanical latches and a locking bar (hasp).

All four doors have glass peep holes and the two inner doors have chemical test cylinders, to test the air in the chamber. The control booth has an open window of some 6 inches by 10 inches, never having provision for glass or gasketing, barred horizontally and vertically with reinforcing rods and opening into chamber #2. See drawing. Two of the doors open into chamber #1, one front and one rear, to the outside. One door opens into chamber #2 in the front. The remaining door opens into an unknown area behind chamber #2. Both chambers have piping, allegedly for carbon monoxide gas, but that in chamber #2 is incomplete, apparently never having been completed. Chamber #1 has finished piping, terminated in gas ports at two corners of the room. Chamber #2 has provision for a roof vent, but it appears never to have been cut through the roof. Chamber #1 has a heater/circulatory system for the air, which is not properly designed (the inlet and outlet are too close) and has no provision for venting.

The walls are of stucco, the roof and floor are of poured concrete, none of which has been sealed, inside or out. There are two heater circulators built as sheds on the side of the building, one for chamber 31 and the other for something in the Bath and Disinfection facility, forward, (see drawing) neither of which are properly designed and have no provision for vent/exhaust. The walls in chamber #1 have the characteristic blue ferric-ferro-cyanide staining. The building is unheated and damp.

Although at first glance these facilities appear properly designed, they fail to meet all the required criteria for an execution gas chamber or a delousing facility. First, there is no sealant on any of the inside or outside surfaces. Second, the depressed walkway is a potential gas trap for HCN, making the building extremely dangerous. Chamber #2 is incomplete and probably was never used. The piping is incomplete and the vent has never been opened in the roof. Although chamber #1 is operational for carbon monoxide, it is poorly vented and not operational for HCN. The heater/circulator is improperly installed. There is no vent or stack.

Therefore, it is the author's best engineering opinion that chambers #1 and #2 were never, and could not ever, be used as execution gas chambers. None of the facilities at Majdanek are suitable, or were used, for execution purposes.

Chamber #1 has an area of 480 sq. ft., a volume of 4240 cubic feet, will hold 54 persons and use one pound of Zyklon B gas. Chamber #2 has an area of 209 sq. ft., a volume of 1850 cubic feet, will hold 24 persons and use 0.5 pounds of Zyklon B gas. Assuming gas chamber usage, the maximum weekly execution rate would have been the figures set out in Table VII.

Chamber #1	54 persons/week
Chamber #2	24 persons/week

## STATISTICS

The statistics set out in Table VIII were generated for this report. Assuming the gas chambers existed (and they did not), these figures represent the maximum 24-hour, 7-day a week outputs of each facility and the amount of Zyklon B gas required.

Relative to the additional alleged execution facilities of Chelmno (gas vans), Belzec, Sobibor, Treblinka and any others, it should be noted that carbon monoxide gas was allegedly used.

As discussed above, carbon monoxide gas is not an execution gas and the author believes that before the gas could take effect, all would have suffocated. Therefore, it is the author's best engineering opinion that no one died of CO execution.

[Next page: Table VIII]

TABLE VIII  
 (Compiled Hypothetical Maximum Execution and  
 Crematory Usage Rates)

	Gassed (Hypothetical)	Cremated (Theoretical)	Cremated (Real-time)	lbs./kg.
<b>Krema I - 11-41 -5-43</b>				
Inclusive				
72 wks. @ 94/wk.	6,768			
72 wks. @ 286/wk.		20,592		
72 wks. @ 126/wk.			9,072	
Total Zyklon B gas				136/61.2
<b>Krema II - 3-43 -11-44</b>				
Inclusive				
84 wks. @ 278/wk.	23,352			
84 wks. @ 714/wk.		59,976		
84 wks. @ 315/wk.			26,460	
Total Zyklon B gas				420/189
<b>Krema III - 6-43 -11-44</b>				
Inclusive				
72 wks. @ 278/wk.	20,016			
72 wks. @ 714/wk.		51,408		
72 wks. @ 315/wk.			22,680	
Total Zyklon B gas				360/162
<b>Krema IV - 3-43 -10-44</b>				
Inclusive				
80 wks. @ 209/wk.	16,720			
80 wks. @ 385/wk.		30,800		
80 wks. @ 168/wk.			13,440	
Total Zyklon B gas				300/135
<b>Krema V - 4-43 -11-44</b>				
Inclusive				
80 wks. @ 570/wk.	45,600			
80 wks. @ 385/wk.		30,800		
80 wks. @ 168/wk.			13,440	
Total Zyklon B gas				820/369
<b>Majdanek 9-42 -11-43</b>				
Delousing Facility at Bath #1				
60 wks. @ 90/wk.	5,400			
Total Zyklon B gas				120/54
<b>Experimental Chambers</b>				
#1 60 wks. @ 54/wk.	3,240			
Total Zyklon B gas				60/27
#2 60 wks. @ 24/wk.	1,440			
Total Zyklon B gas				30/13.5
<b>Krema and Chamber</b>				
60 wks. @ 24/wk.	1,440			
60 wks. @ 714/wk.		42,840		
60 wks. @ 315/wk.			18,900	
Total Zyklon B gas				30/13.5
<b>Krema Old</b>				
60 wks. @ 96/wk.		5,760		
60 wks. @ 101/wk.			6,060	

## CONCLUSION

After reviewing all of the material and inspecting all of the sites at Auschwitz, Birkenau and Majdanek, your author finds the evidence as overwhelming. There were no execution gas chambers at any of these locations. It is the best engineering opinion of this author that the alleged gas chambers at the inspected sites *could not have then been, or now, be utilized or seriously considered to function as execution gas chambers.*

Prepared this 5th day of April, 1988 at Malden, Massachusetts.

Fred Leuchter Associates

[Signed]

Fred A. Leuchter, Jr.

Chief Engineer

## BIBLIOGRAPHY

CHEMICAL ANALYSIS -- 32 SAMPLES Prepared by Alpha Analytical Labs for  
Fred A. Leuchter Associates  
*AUSCHWITZ, CRIME AGAINST MANKIND*, Auschwitz State Museum, 1988  
*AUSCHWITZ, 1940-1945*, Museum Guide Book, Auschwitz State Museum  
*MAJDANEK*, Duszak, Auschwitz State Museum, 1985  
*MAJDANEK*, Marszalek, State Museum, Auschwitz, 1983  
MAPS AND MATERIAL, Auschwitz and Majdanek State Museums  
"DIESEL GAS CHAMBERS, MYTH WITHIN A MYTH", Berg, Spring 1984,  
*Journal of Historical Review*  
"GERMAN DELOUSING CHAMBERS", Berg Spring 1986, *Journal of Historical  
Review*  
*THE HOAX OF THE TWENTIETH CENTURY*, Butz, Historical review Press  
ZYKLON B FOR PEST CONTROL, DEGESCH Publication  
HYDROGEN CYANIDE, Dupont Publication, 7-83  
MATERIAL SAFETY DATA SHEET, Dupont Publication, 8-85  
SODIUM CYANIDE, Dupont Publication, 7-85  
"THE MECHANICS OF GASSING", Faurisson, Spring 1980, *Journal of Historical  
Review*  
FLOOR PLANS, Krema II, III, IV and V  
GERMAN BLUEPRINTS 9-25-41 10-16-44  
*THE DESTRUCTION OF THE EUROPEAN JEWS*, Hilberg, Holmes and Meier, New  
York, 1985  
*MAJDANEK*, Marszalek Interpress, 1986  
JOURNAL 2-25-88 through 3-3-88  
ASSORTED PHOTOS, by Fred A. Leuchter Associates  
EIGHT (8) DRAWINGS Krema I, II, III, IV, V Delousing Chamber, Building #1  
Experimental Gas Chambers Unknown Heater Circulator All prepared for this report  
by H. Miller, Fred A. Leuchter Associates  
PROPOSAL, MISSOURI STATE PENITENTIARY GAS CHAMBER Leuchter,  
Leuchter Associates, 1987  
"ZYKLON B, TRIAL OF BRUNO TESCH", Lindsey, Fall 1983, *Journal of  
Historical Review*  
*MAJDANEK CONCENTRATION CAMP*, Rajca, Lublin 1983, State Museum  
DOCUMENT NI 9912, Office of Chief War Counsel for War Crimes Zyklon B  
SAMPLE LOG 2-5-88 through 3-2-88  
Auschwitz State Museum Auschwitz, Poland  
DuPont Head Office USA E.I. du Pont de Nemours & Co. (Inc.)

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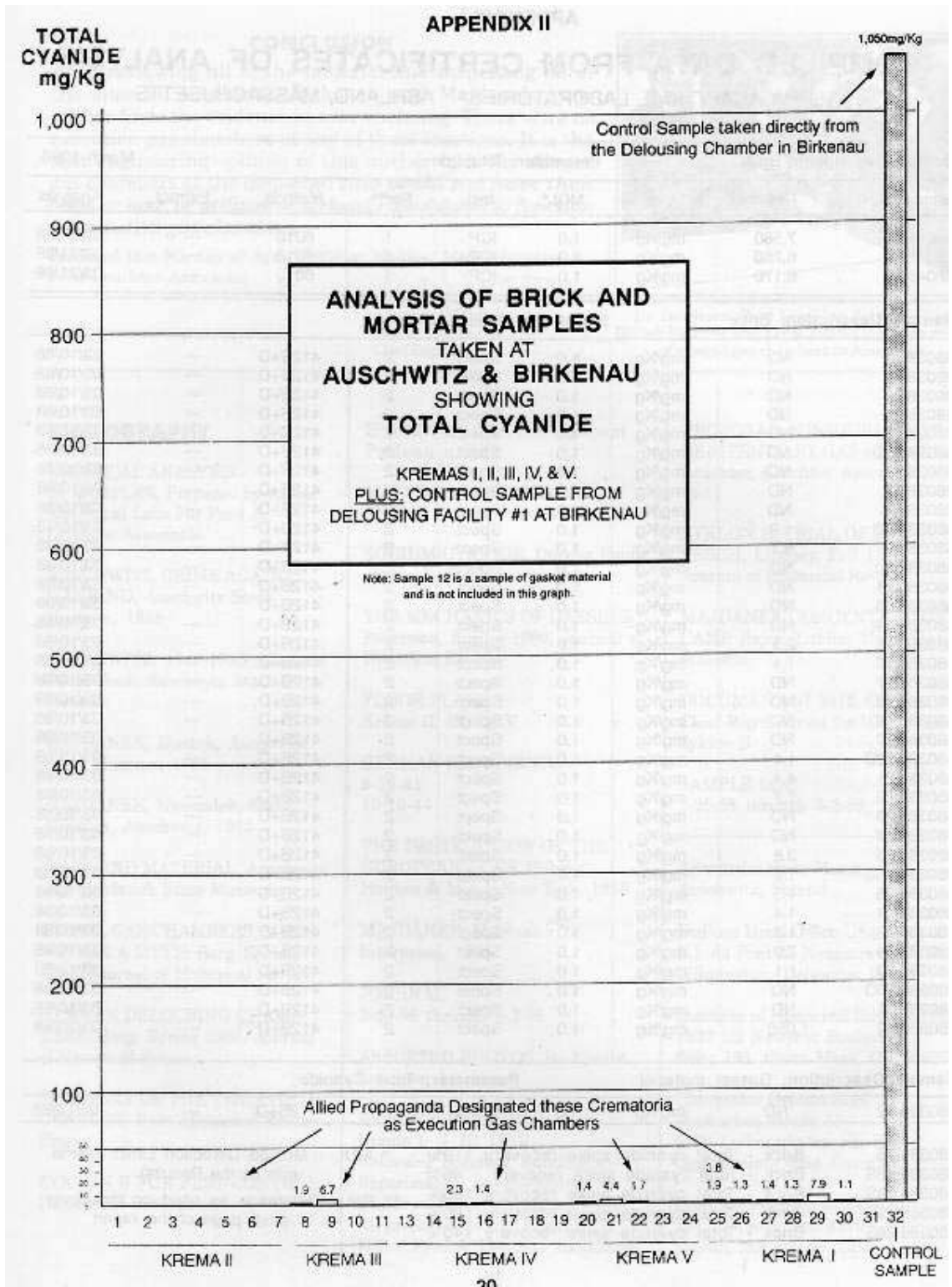
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Appendix 1: Graphics Analysis of Samples Taken at Auschwitz  
& Birkenau Showing Total Cyanide

COMPILED DATA FROM CERTIFICATES OF ANALYSIS								
ALPHA ANALYTICAL LABORATORIES					ASHLAND, MASSACHUSETTS			
Sample Description: Brick			Parameter: Total Iron			March 1988		
Sample No.	Results	Units	MDL*	Inst	Ref**	Method	Extract	Analysis
880451.1	7,580	mg/Kg	1.0	ICP	1	6010	---	03/21/88
880451.2	6,280	mg/Kg	1.0	ICP	1	6010	---	03/21/88
880451.3	6,170	mg/Kg	1.0	ICP	1	6010	---	03/21/88
Sample Description: Brick			Parameter: Total Cyanide					
880386.1	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.2	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.3	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.4	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.5	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.5D	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.6	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.7	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.8	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.8D	1.9	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.9	6.7	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.10	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.11	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.13	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.14	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.15	2.3	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.16	1.4	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.17	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.18	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.19	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.20	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.20D	1.4	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.21	4.4	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.22	1.7	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.23	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.24	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.25	3.8	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.25D	1.9	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.26	1.3	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.27	1.4	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.28	1.3	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.29	7.9	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.30	1.1	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.30D	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.31	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.32	1,050	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
Sample Description: Gasket material			Parameter: Total Cyanide					
880386.12	ND	mg/Kg	1.0	Spect	2	412B+D	---	03/10/88
880386.7S	Brick - Total cyanide spike recovery			119%	* MDL - Method Detection Limits (same units as the Results)			
880386.16S	Brick - Total cyanide spike recovery			96%				
880386.18S	Brick - Total cyanide spike recovery			100%	** Ref - Reference as cited on the cover (first) page of this report.			
880386.19S	Brick - Total cyanide spike recovery			120%				
880386.26S	Brick - Total cyanide spike recovery			140%				

## Appendix 2: Sample Analysis Graph



## APPENDIX III

### TRANSLATION OF DOC. NO. NI-9912 Office of Chief of Counsel for War Crimes

#### *DIRECTIVES FOR THE USE OF PRUSSIC ACID (ZYKLON) FOR THE DESTRUCTION OF VERMIN (DISINFESTATION)*

##### *I. Properties of Prussic Acid (Hydrocyanic acid)*

Prussic acid is a gas which is generated by evaporation.

- Boiling Point: 25 degrees Centigrade
- Freezing Point: -15 degrees Centigrade
- Specific Gravity: 0.69
- Steam density: 0.97 (Air: 1.0)
- The liquid evaporates easily
- Liquid: Transparent, Colorless
- Smell: Peculiar, Repulsively Sweet
- Extraordinarily Great Penetrative Powers
- Prussic Acid is Soluble in Water

##### Danger of Explosion:

75 g. prussic acid 1 cbm air. (Normal application approx. 8-10 g. per cbm, therefore, not explosive). Prussic acid may not be brought into contact with an open flame, glowing wires, etc. because then it burns up slowly and loses all its effectiveness (carbonic acid, water and nitrogen are formed).

##### Toxic effects on warm-blooded animals:

Since the prussic acid has practically no indicative irritant effect it is highly toxic and very dangerous. Prussic acid is one of the most powerful poisons. 1 mg. per kg. of body weight is sufficient to kill a human being. Women and children are generally more susceptible than men. Very small amounts of prussic acid do not harm the human body, even if breathed continuously. Birds and fishes are particularly susceptible to prussic acid.

##### Toxic effects on insects:

The effects of prussic acid on insects do not depend on the temperature to the same extent as that of other gases, that is, it is effective in low temperatures (even at 5 degrees Centigrade). The eggs of many insects, particularly of bugs and lice, are more susceptible than the full-grown insects.

Toxic effects on plants:

The degree of toxicity depends on the type of vegetation on the plants. Plants with thick leaves are less susceptible than those with thin ones. Mildew and dry-rot are not killed by prussic acid. Prussic acid does not destroy bacteria.

## *II. Method of Using Prussic Acid*

ZYKLON is the absorption of a mixture of prussic acid and an irritant by a carrier. Wood fibre discs, a reddish brown granular mass (Diagriess - Dia gravel) or small blue cubes (Erco) are used as carriers.

Apart from serving its purpose as indicator, this irritant also has the advantage of stimulating the respiration of insects. Prussic acid and the irritant are generated through simple evaporation. Zyklon will keep for 3 months. Use damaged cans first. The contents of a can must all be used up at once. Liquid prussic acid damages polish, lacquer, paint, etc. Gaseous prussic acid is harmless. The toxicity of the prussic acid remains unchanged by the addition of the irritant; the danger connected with it is however considerably decreased.

Zyklon can be rendered inoffensive by combustion.

## *III. Possible Poisoning*

### 1. Slight poisoning:

Dizziness, headache, vomiting, general feeling of sickness, etc. All these symptoms pass if one immediately gets out into the fresh air. Alcohol reduces resistance to prussic acid gassing, therefore, do not drink alcohol before fumigation.

Prescribe: 1 tablet Cardiazol or Veriazol in order to prevent heart disorders, if necessary, repeat after 2-3 hours.

### 2. Severe poisoning:

The affected person will collapse suddenly and faint. First Aid: fresh air, remove gas mask, loosen clothing, apply artificial respiration. Lobelin, intermuscular 0.01 g. Do not give camphor injections.

[page 2 of original]

### 3. Poisoning through the skin:

Symptoms as for 1. Treat in the same way.

### 4. Stomach poisoning:

Treat with Lobelin, intermuscular 0.01 g., ferrous sulphate, burnt magnesia.

#### *IV. Protection Against Gas*

When fumigating with Zyklon use only special filters, e.g., the filter insert "J" (blue-brown) of the Auergesellschaft Berlin or of the Draegerwerke, Luebeck. Should gas seep through the mask, leave the building immediately and change filters after also checking the mask and its fit to see whether they are tight. The filter insert is exhausted if gas enters through the mask. If using the filter "J", first move around in the open air for approx. 2 minutes so that a certain amount of moisture from the breath may gather in the filter insert. Under no circumstances should filters be changed inside gas-filled rooms.

#### *V. Personnel*

A disinfection squad consisting of at least 2 members is employed for each disinfection project. The fumigation chief is responsible for the fumigation. His particular duties are inspection, airing, release and safety measures. The fumigation chief is to appoint a deputy in case he has to leave. The orders of the fumigation chief are to be followed without delay.

Untrained personnel or persons who are trained but do not yet hold a certificate may not be called in to work on gassing operations, nor may they be taken into gas-filled rooms. The fumigation chief must also know where to contact his personnel. Every person must at all times be able to prove that he has official authorization for the use of prussic acid for extermination purposes.

#### *VI. Equipment*

Each member must at all times carry with him:

1. His own gas mask.
2. At least 2 special filter inserts against Zyklon prussic acid.
3. The leaflet 'First Aid for Prussic Acid Poisoning.'
4. Work order.
5. Authorization certificate.

Each disinfection squad must at all times carry:

1. At least 3 special inserts as extra stock
2. 1 gas detector
3. 1 instrument for injecting Lobelin.
4. Lobelin 0.01 g. ampoules.
5. Cardiazol, Veriazol tablets.
6. 1 lever or pickhammer for opening the cans of Zyklon.
7. Warning signs as per regulation.
8. Material for sealing.
9. Sheets of paper to serve as pads.
10. Flashlight.

All equipment is to be kept clean and in good order at all times. Damage to equipment is to be repaired at once.

## *VII. Planning Fumigations*

1. Can the fumigation be carried out at all?
  - (a) Type of building and situation
  - (b) Condition of roof
  - (c) Condition of windows
  - (d) Presence of heating shafts, air shafts, breaks in the walls, etc.
2. Determine the kind of vermin to be exterminated.
3. Calculate the space (Do not rely on drawings but take measurements yourself. Take only outside measurements, including walls).
4. Prepare personnel (Remove domestic animals, plants food and drink, undeveloped photographic plates, and gas mask filters).
5. Find which opening will be particularly difficult to seal (Air shafts, drains, large openings which have been boarded up, roofs).
6. Settle necessary safety measures (Guarding, work detachment for sealing).
7. Fix the date for the fumigation and the time for clearing the building.
8. If necessary, arrange safety measures for the neighborhood in good time.
9. Notify authorities.

## *VIII. Preparation for Fumigation*

1. Seal.
2. Open all doors, closets, drawers, etc.
3. Pull bedding apart.
4. Remove all liquids (remains of coffee, washing water, etc.).
5. Remove all food.
6. Remove all plants and domestic animals (aquaria, etc.).
7. Remove all undeveloped photographic plates and films.
8. Remove adhesive plaster, all medical supplies, whether open or in paper bags (particularly coal).
9. Remove all gas mask filters.
10. Prepare for check on results.
11. Clear out personnel.
12. Take over keys (every door key).

## *IX. The Strength of the Gas and Time Required for it to Take Effect Depends on:*

- the type of vermin
- the temperature
- the amount of furniture in the rooms
- the imperviousness of the building

For inside temperatures of more than 5 degrees Centigrade, it is customary to use 8 g. prussic acid per cbm.

Time needed to take effect: 16 hours, unless there are special circumstances such as a closed-in type of building, which requires less time. If the weather is warm it is

possible to reduce this to a minimum of 6 hours. The period is to be extended to at least 32 hours if the temperature is below 5 degrees Centigrade.

The strength and time as above are to be applied in the case of bugs, lice fleas, etc., with eggs, larvae and chrysalises.

For clothes-moths: temperatures above 10 degrees Centigrade, 16 g. per cbm and 24 hours to take effect. For flour-moths: same as for bugs.

### *X. Fumigation of a Building*

1. Check that everybody has left the building.
2. Unpack the boxes of Zyklon. Make the appropriate amount ready for each floor.
3. Distribute the cans. One man to go into the building and receive the cans which have been brought up by the work detachment and to distribute them. (Have them put next to the pads.)
4. Dismiss the work detachment.
5. Post the guard. Fumigation chief to instruct the guard.
6. Check that sealing and cleaning have been completed.
7. Put on gas masks.
8. Open the cans and pour out their contents. The contents are to be spread thinly so that the Zyklon can evaporate quickly and the necessary density of the gas can be achieved as soon as possible. This process is to start on the top floor but the cellar is to be dealt with before the ground floor, should the cellar have no exit. Rooms which have been dealt with should, as far as possible, not be re-entered. The processing is to be done slowly and calmly. The staircase particularly should only be used slowly. The processing may only be interrupted in an emergency.
9. The exit door to be locked, sealed (do not forget the keyhole) and its key handed over to the fumigation chief.
10. On the door fix a warning sign with the legend: "Danger -- Poison Gas. Danger to Life. No Admittance." This warning sign is to be in several languages if necessary, and in any case it must be marked with at least 1 death's head, clearly visible.
11. Gas masks, apparatus for resuscitation and gas detectors are to be kept available at all times. Every member of the fumigation squad must know where these objects are located.
12. At least 1 member of the fumigation squad must always remain near the building which is being fumigated. The guard must be notified of his position.

### *XI. Airing*

The airing is connected with the greatest danger for those participating and others. Therefore, it must be carried out particularly carefully and a gas mask should always be worn. The airing should take place according to the following principles: pure air should always be within reach in the shortest possible time and the gas should flow out to that side where it cannot endanger people who are not participating. Should the airing be difficult, one trained man should remain in front of the building in order to watch how the gas is blowing away.

1. Take care to see that no strangers remain in the vicinity of the building.
2. Post the guards in such a way that they are not annoyed by the gas as it blows out, but can still watch the entrances to the building.
3. Put on gas mask.
4. Enter building. Close door, but do not lock it.
5. First open the windows on that side of the building where there is no wind. Air floor by floor. Start on the ground floor and after each floor, take at least 10 minutes rest.
6. The doors leading to the corridor, connecting doors between rooms and windows must be opened in each room. Should there be difficulty in opening any of the windows, they should only be opened after most of the gas has blown away.
7. Partitions and other methods used to seal the room which cannot be replaced quickly should only be removed after most of the gas has blown away.
8. Care should be taken to see that the heating system and water pipes do not freeze should there be frost or danger of it.
9. Rooms with valuable contents, such as clothing stores, etc. may be locked again as soon as the windows have been opened.
10. Windows and doors which have been opened should be fastened in such a way that they cannot slam.
11. Covers in chimneys may be removed after the provisional release of the building.
12. The airing should continue for at least 20 hours.
13. The guard should remain near the building for the whole of this time.

### *XII. Provisional Release*

A fumigated room may be released provisionally as soon as the paper strip of the gas detector is of a lighter blue than the center color pattern, when the doors and windows are open. Only work concerned with airing and cleaning up may be done in the rooms which have been provisionally released. Under no circumstances may anyone rest or sleep in these rooms. The doors and windows must be left open all the time.

### *XIII. Cleaning Up After Provisional Release*

- Remove remains of Zyklon from the fumigated rooms. They should generally be sent back to the factory in the same way as cans and boxes. Before boxes are sent back from the fumigated rooms, the inscription "Poison" must be removed from them. Damp, wet, or soiled remains, as well as damaged cans may not be sent back under any circumstances. They may be thrown on a rubbish or slag heap, but may never be emptied into drains.
- Mattresses, straw palliasses, pillows, upholstered furniture and similar items must be shaken or beaten for at least one hour in the open air (if rainy, at least 2 hours in the hall) under the supervision of the fumigation chief (or his assistant.)
- If possible, the stuffing of straw palliasses should be changed. The old stuffing may not however, be burnt, but may be re-used after it has been aired for a further period.
- Should the chimneys have been covered from above, these coverings must be removed carefully, since otherwise there is a danger that the fires in the stoves



and hearths will not have sufficient draught, which may cause carbon monoxide poisoning.

- After the final release has been made, two copies of a fumigation report are to be filled in, in the prescribed manner. the following points in particular should be shown:
  - (a) Volume of fumigated rooms.
  - (b) Amount of Zyklon used.
  - (c) Name of fumigation chief.
  - (d) Names of other personnel.
  - (e) Time required for gas to take effect.
  - (f) Time at which disinfested rooms were released.

#### *XIV. Final Release*

1. Under no circumstances less than 21 hours after airing was started.
2. All items removed for beating are to be taken back into the room.
3. Doors and windows to be closed for one hour.
4. In rooms with heating facilities, a temperature of at least 15 degrees Centigrade must be produced.
5. Gas detecting: The paper strip may not show a darker blue than the lightest color, even between blankets and mattresses which have been placed on top of each other, or in rooms which are not easily accessible and which it is difficult to air. Should this not be the case, airing must continue and the check for gas repeated after a few hours.
6. The check for gas must be made in each room of buildings which are again to be used as sleeping accommodation as soon as possible. Under no circumstances may anyone sleep in a room which has been fumigated in the night following the fumigation. The windows must always remain open during the first night that the room is used again.
7. The fumigation chief or his deputy may not leave the building until the very last room has been finally released.

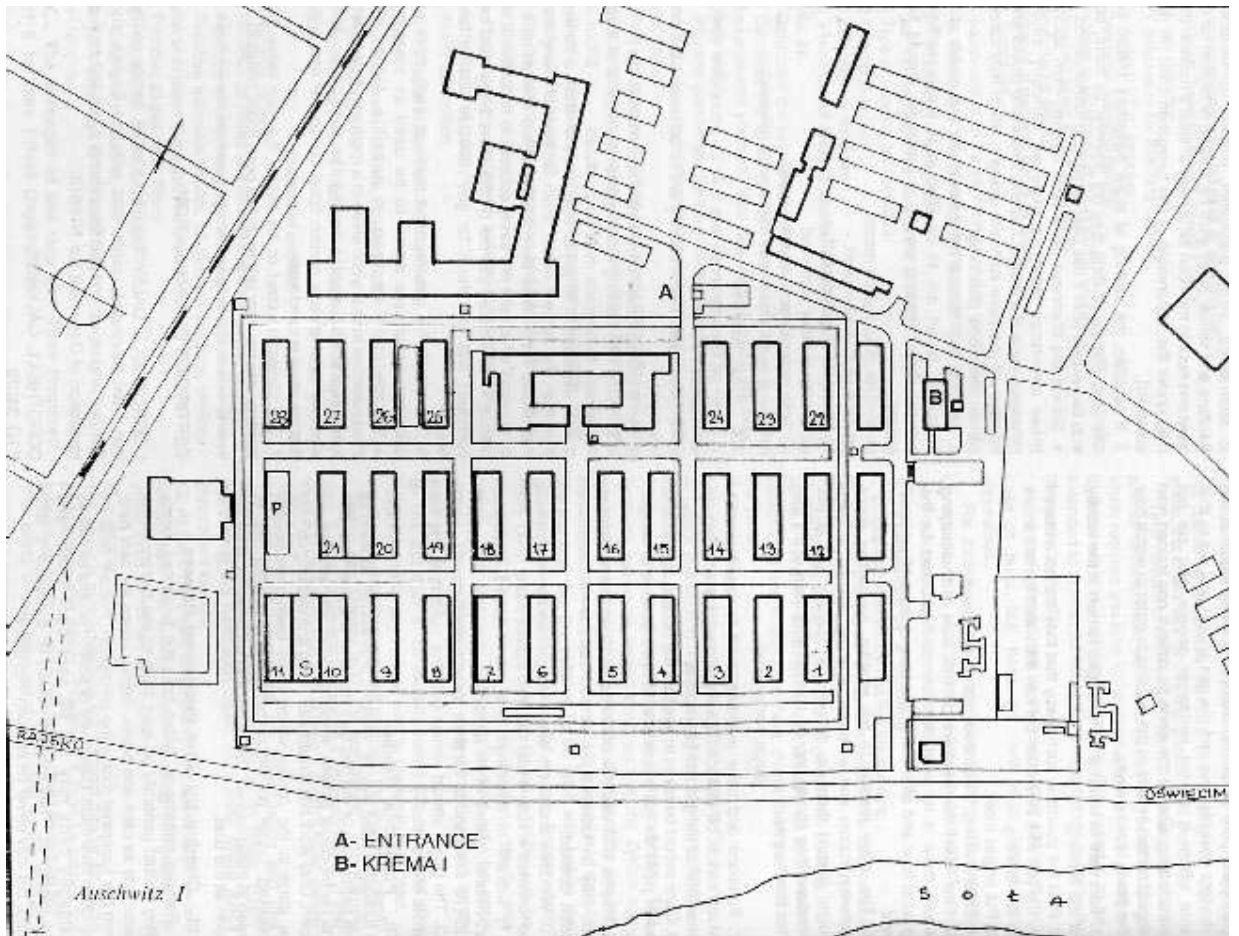
(Issued by the Health Institution of the Protectorate Bohemia and Moravia in Prague)

#### *CERTIFICATE OF TRANSLATION*

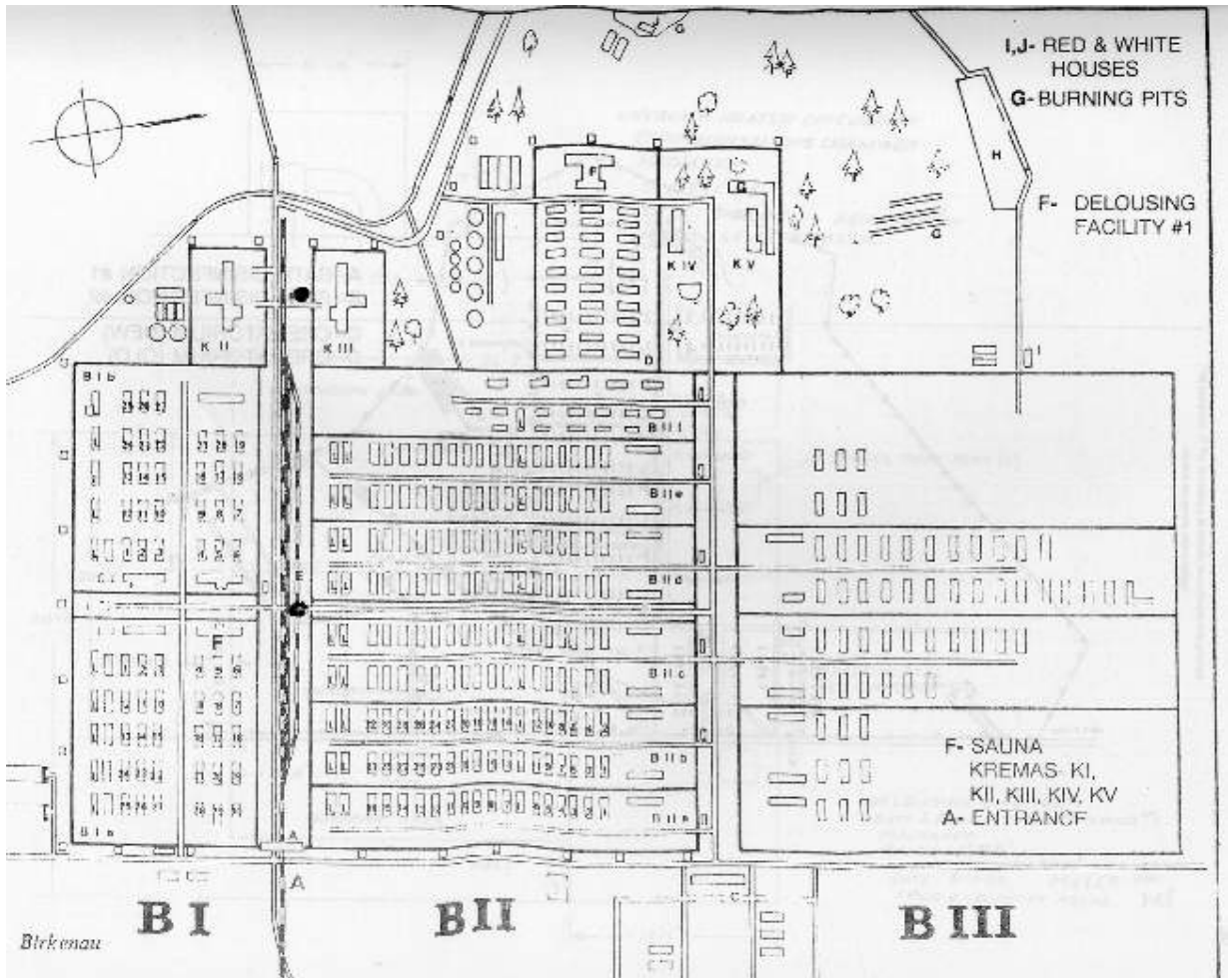
I, Dorothea L Galewski, ETO #34079, hereby certify that I am thoroughly conversant with the English and German languages; and that the above is a true and correct translation of Document No. NI-9912.

(Signed: Dorothea L Galewski / ETO 34079)

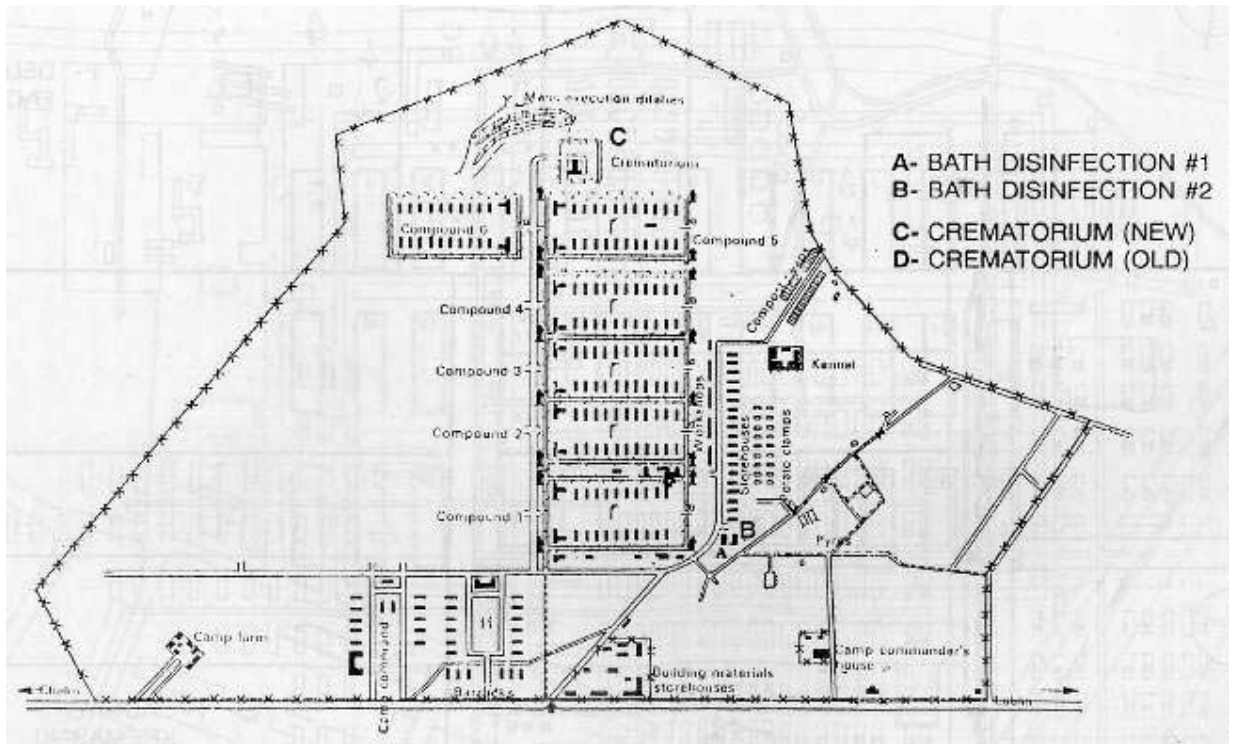
Appendix 4 (1): Auschwitz (map)



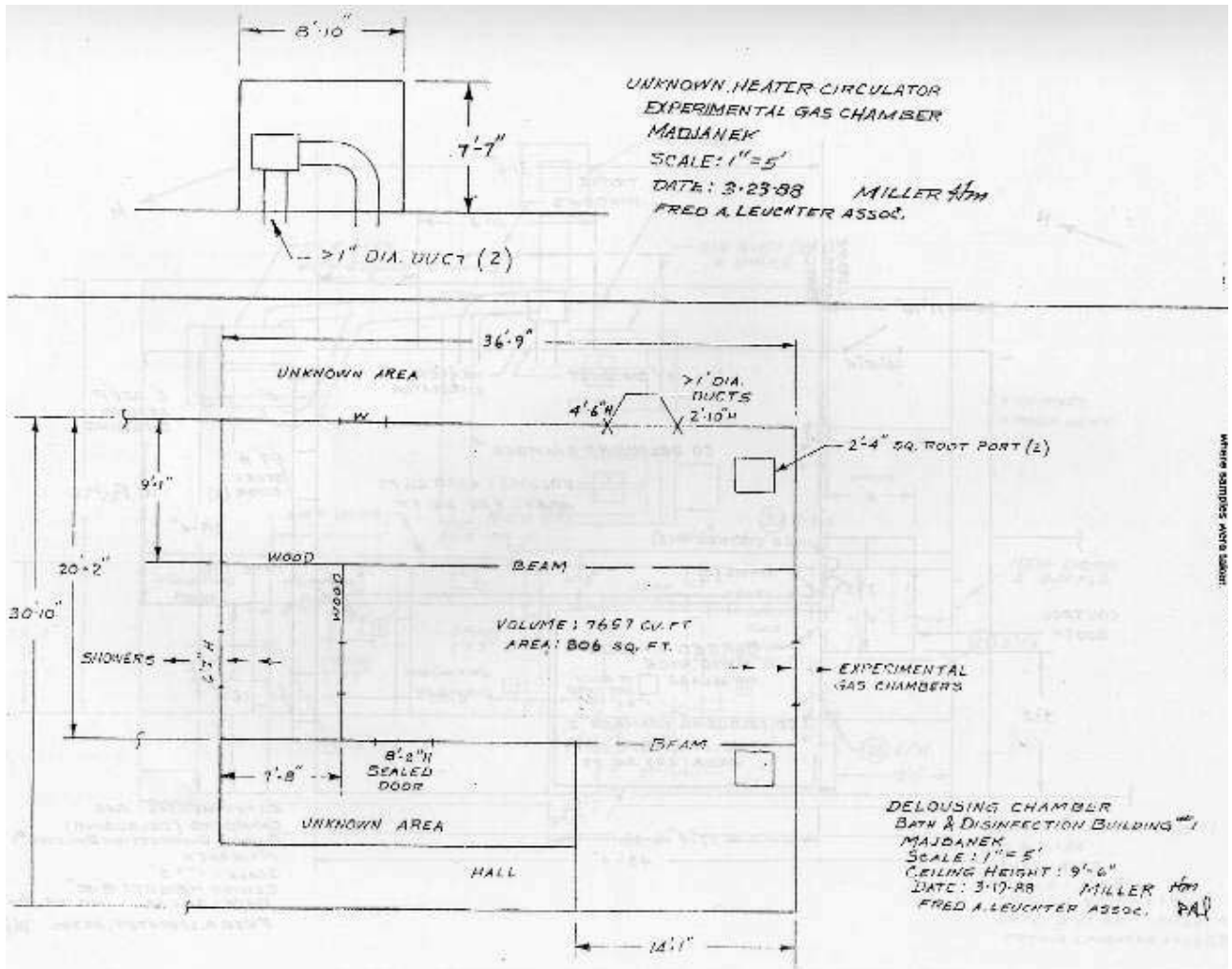
Appendix 4 (2): Birkenau (map)



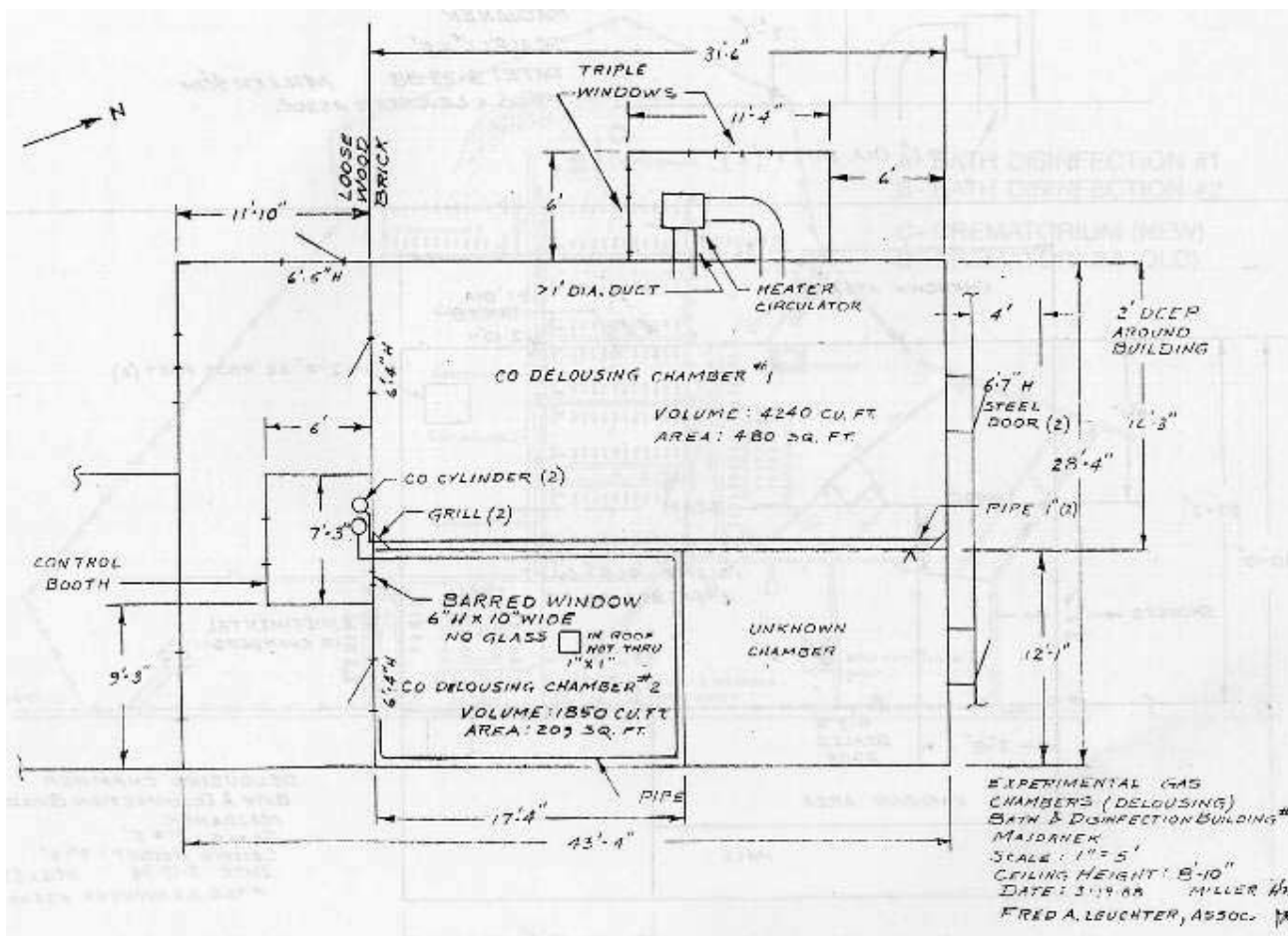
Appendix 4 (3): Majdanek (map)



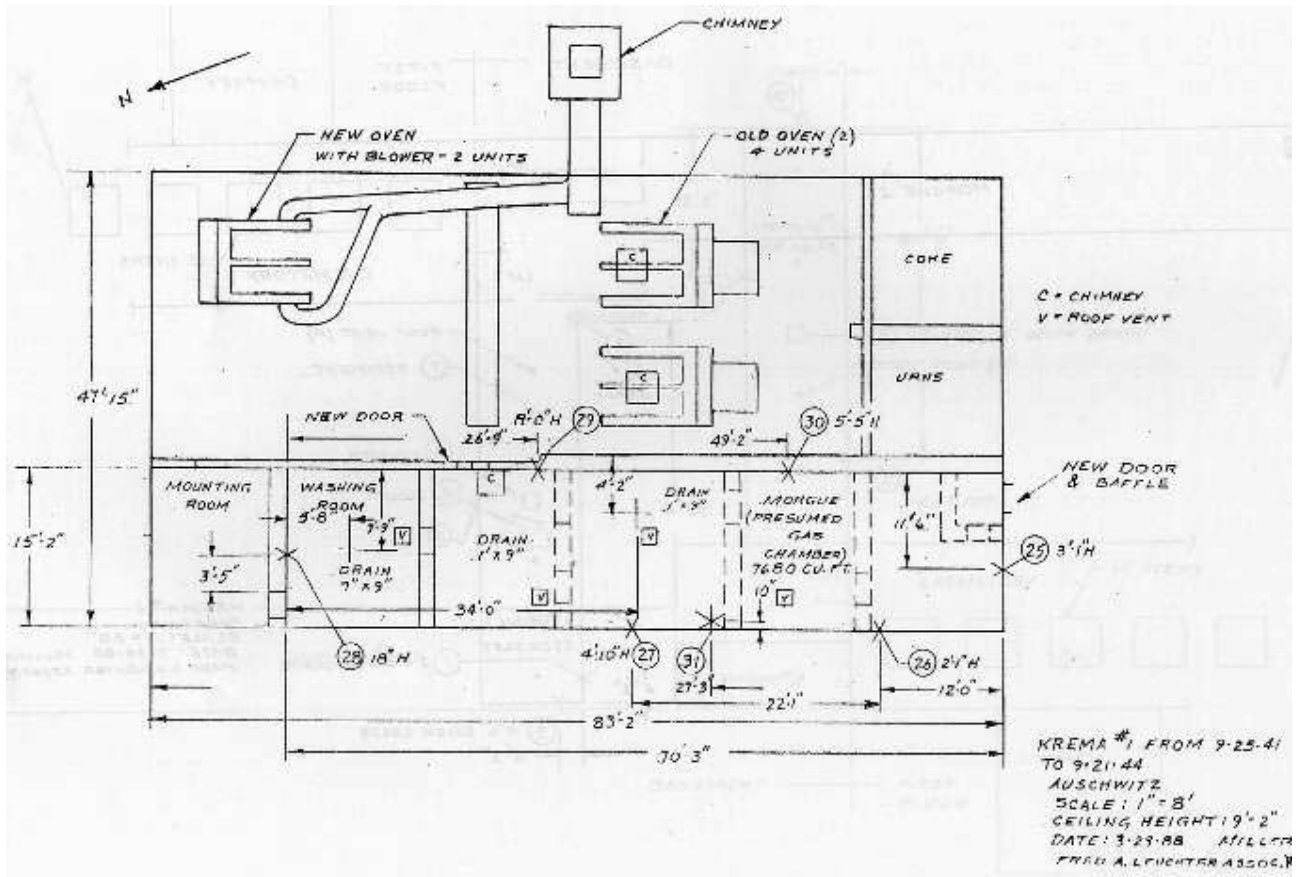
Appendix 5 (1): Krema I



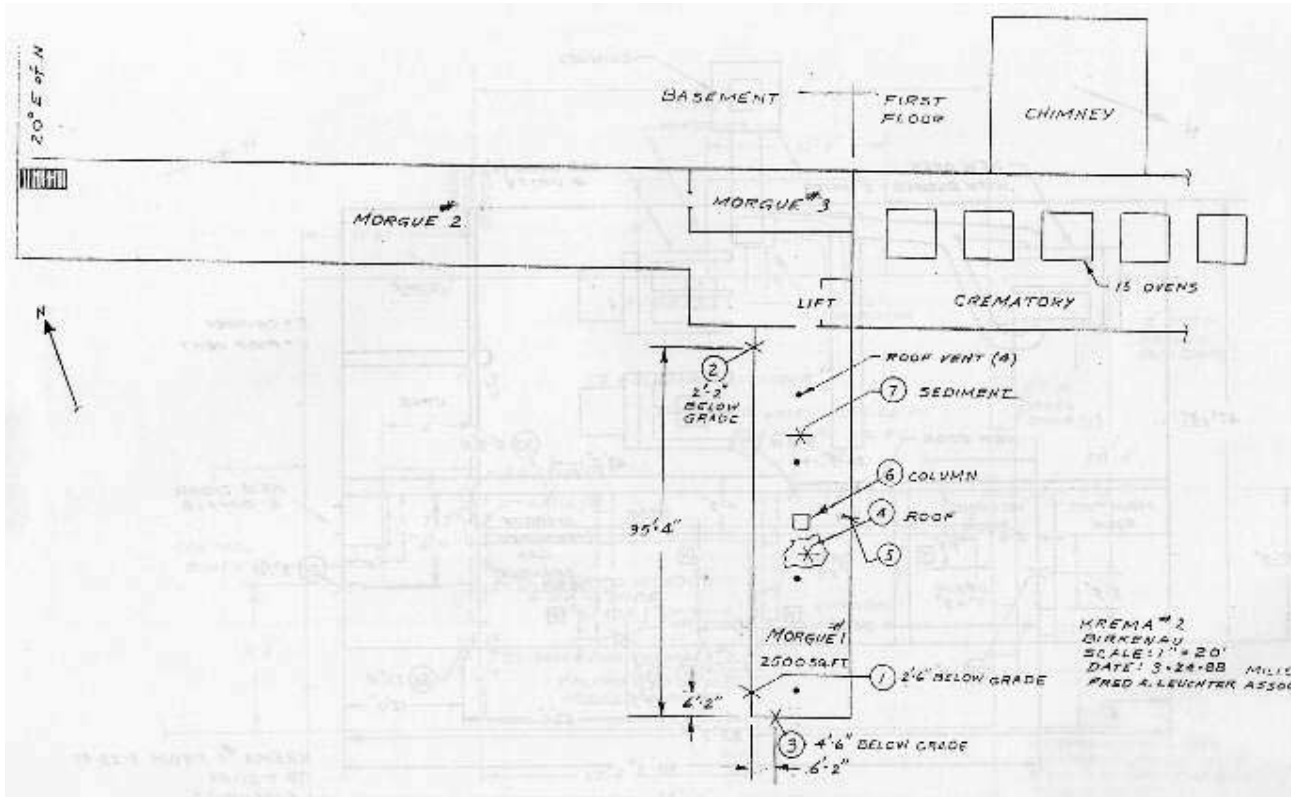
## Appendix 5 (2): Crema II



Appendix 5 (3): Krema III

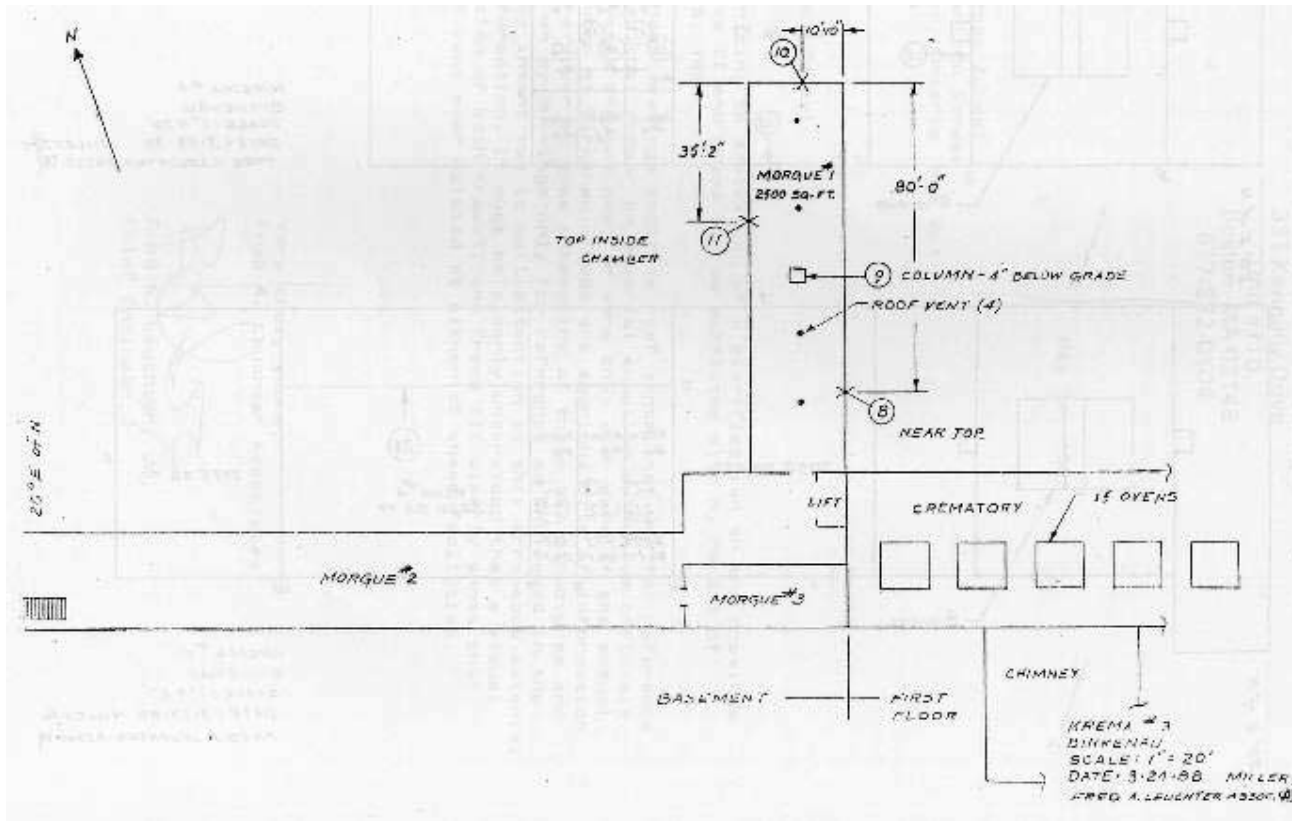


Appendix 5 (4): Krema IV

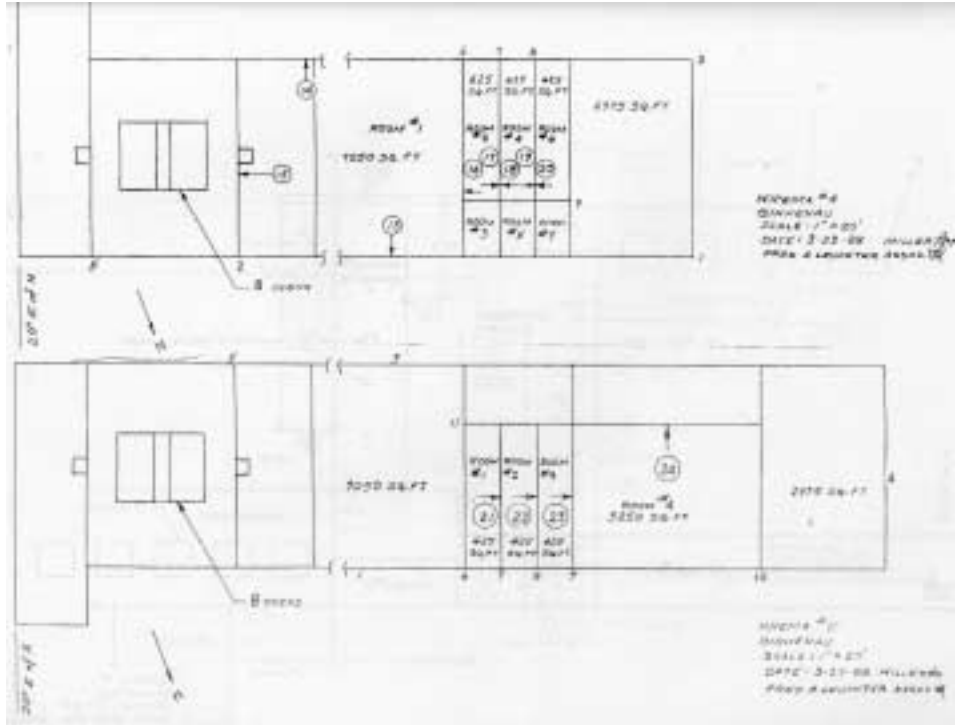




# Appendix 5 (5): Krema V



Appendix 5 (6): Delousing Chamber and Experimental Gas Chamber for Delousing; Unknown Heater Circulator (Majdanek)



Appendix 6: Letter from F. Leuchter to E. Zundel, dated May 14, 1988; clarification of Krema II and Krema III drawing.

APPENDIX VI

Fred A. Leuchter, Associates  
231 Kennedy Drive  
Unit #110  
Boston MA 02148  
617-322-0104

May 14, 1988


Mr. Ernst Zundel  
206 Carlton Street  
Toronto, Ontario M5A 2L1  
Canada

Dear Mr. Zundel:

I am writing to advise you of a clarification on the drawings of Krema II and Krema III as submitted with my report of April 5, 1988.


Both these drawings indicate roof vents that are for reference only, as they appear on material supplied by Museum officials. These vents are not now, or were they ever part of the actual structures at Birkenau. These are spurious bits of information that are shown on some schematics of these two structures and appear on my drawings only for reference as indicated in the text. My intent was to call attention to this erroneous material and information. It must be clearly understood that a visual inspection of both Krema II and Krema III clearly shows that no roof vent ever existed at either of these facilities.

Very truly yours,  
Fred A. Leuchter Associates

  
Fred A. Leuchter, Jr.  
Chief Engineer.

Appendix 7: Letter from Bill Armontrout, Warden of Missouri State Penitentiary

34 APPENDIX VII



JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES

MISSOURI STATE PENITENTIARY

P.O. BOX 597  
JEFFERSON CITY, MISSOURI 65102-0597  
PHONE: 314-751-3224

GEORGE A. LOMBARDI  
DIRECTOR  
DIVISION OF  
ADULT INSTITUTIONS

BILL M. ARMONTROUT  
WARDEN  
MISSOURI STATE PENITENTIARY

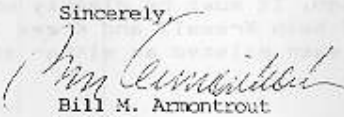
January 13, 1988

Ms. Barbara Kulaszka  
Barrister and Solicitor  
8655 Queens Avenue  
London, Ontario Canada N5W 3H7

Dear Ms. Kulaszka:

I received your letter regarding Queen v. Zundel and the testimony of an expert witness dealing with execution by "gas chambers". I have considerable knowledge in that area, however, I suggest you contact Mr. Fred A. Luechter, 108 Bunker Hill Street, Boston, MA 02192, home telephone number 617-322-0104. Mr. Luechter is an engineer specializing in gas chambers and executions. He is well versed in all areas and is the only consultant in the United States that I know of.

If I can be of further assistance, please do not hesitate to call on me at any time.

Sincerely,  
  
Bill M. Armontrout  
Warden

BA/pb

Appendix 8: Letter from Fred Leuchter to Alpha Analytical Laboratory, dated March 9, 1998

APPENDIX VIII

Fred A. Leuchter, Associates  
231 Kennedy Drive  
Unit #110  
Boston MA 02148  
617-322-0104

March 9, 1998

Alpha Analytical  
200 Homer Street  
Ashland, MA 01721

Gentleman:

Enclosed, please find 32 samples of materials for analysis. All are for determination of cyanate residue except # 12 which is for definition of material.

Sample # 32 is control sample. Note blue color. Other samples should equal or exceed cyanate content.

Sample # 12 is Gasket material. Determine composition.

Sample # 7 is sediment material. Determine cyanate content.


Samples #1 through # 11; Samples # 13 Through 32. Brick, mortar and sediment. Cyanate content.

Test results for court litigation. Please certify.

All samples stored in cool, damp and sunlight free locations.

Please complete analysis as soon as possible.

Very truly yours,  
Fred A. Leuchter, Associates

  
Fred A. Leuchter, Jr.  
Chief Engineer

*Under 32*

*ca 3/9/98*

*for Analysis*

Appendix 9: Certification for Chemical Analysis of Waters by the Commonwealth of Massachusetts Dept. of Environment Quality Engineering, dated March 15, 1988

36

APPENDIX IX



*The Commonwealth of Massachusetts*  
*Department of Environmental Quality Engineering*  
*Lawrence Experiment Station*

37 Thattuck Street, Lawrence, Massachusetts 01843

CERTIFICATION FOR CHEMICAL ANALYSIS OF WATERS

LABORATORY: MA086  
Alpha Analytical Labs  
200 Homer Ave.  
Ashland, MA 01721

DATE: 03/15/88

EXPIRATION DATE: 09/15/88

DIRECTOR: Scott McLean  
617) 881-3503

PRIMARY PARAMETERS AND CATEGORIES (DRINKING WATERS)

FULL CERTIFICATION: Trace Metals, Fluoride, Trihalomethanes, Volatile Organics, Corrosivity Series, Sodium

PROVISIONAL CERTIFICATION: Pesticides

SECONDARY PARAMETERS AND CATEGORIES

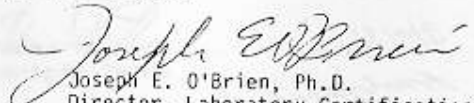
FULL CERTIFICATION: Metals, Minerals, Nutrients, PCB, Pesticides, Volatile Halocarbons, Volatile Aromatics, Cyanide, Phenolics

PROVISIONAL CERTIFICATION: None at present

Massachusetts Department of Environmental Quality Engineering will accept results from all parameters and categories listed above.

This certificate supercedes all previous certificates issued to this laboratory. Reporting of analyses other than those authorized above shall be cause for revocation of certification.

Original Certificate, not copies, must be displayed in a prominent place at all times. Certification subject to approval by OGC.

  
Joseph E. O'Brien, Ph.D.  
Director, Laboratory Certification  
For the Commissioner

100<sup>th</sup> Anniversary  
1887 ————— 1987

Appendix 10: Document International Military Tribunal, DOC. L-022

[Next Page]

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F

International Military Tribunal

# PROCÈS

DES

## GRANDS CRIMINELS DE GUERRE

DEVANT

LE TRIBUNAL MILITAIRE

INTERNATIONAL

NUREMBERG

14 NOVEMBRE 1945 — 1<sup>er</sup> OCTOBRE 1946

APPENDIX X  
Document  
International Military Tribunal, Doc. L-022



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EDITE À NUREMBERG, ALLEMAGNE

1949

### DOCUMENT L-022.

EXTRAITS DU RAPPORT PRÉSENTÉ EN NOVEMBRE 1944 PAR LE COMITÉ DES RÉFUGIÉS DE GUERRE, WASHINGTON D.C. SUR LES CAMPS D'EXTERMINATION (AUSCHWITZ ET BIRKENAU) AVEC UNE ESTIMATION DU NOMBRE DES JUIFS GAZÉS À BIRKENAU, D'AVRIL 1942 À AVRIL 1944. (COTE D'AUDIENCE USA-294.)

#### EXPLANATORY NOTE:

Offset printed copy; orig. in archives of U.S. State Dept; report consists of two accounts of escaped concentration camp inmates—two young Slovakian Jews and a Polish major

Executive Office of the President  
War Refugee Board  
Washington, D. C.

German Extermination Camps —  
Auschwitz and Birkenau.  
(page 33)

Careful estimate of the number of Jews gassed  
in BIRKENAU between April, 1942 and April, 1944  
(according to countries of origin).

Poland (transported by truck)	approximately	300,000
" " " train)	"	600,000
Holland	"	100,000
Greece	"	45,000
France	"	150,000
Belgium	"	50,000
Germany	"	60,000
Yugoslavia, Italy and Norway	"	50,000
Lithuania	"	50,000
Bohemia, Moravia and Austria	"	30,000
Slovakia	"	30,000
Various camps for foreign Jews in Poland	"	300,000
	<b>approximately</b>	<b>1,765,000</b>