

Some Technical and Chemical Considerations about the ‘Gas Chambers’ of Auschwitz and Birkenau

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1. Introduction

Prior to the *Leuchter Report*¹ no scientific studies of any significance had ever been conducted about the homicidal ‘gas chambers’² of Auschwitz and Majdanek, which is astonishing in view of the importance of the topic. Even in the great Auschwitz Trial in Frankfurt in the mid-1960s, the expert reports that were commissioned had an exclusively historical focus, and not even the defense thought to request a report on the alleged murder weapons, which have partly survived to this day. In its verdict the Court stated that it lacked “*almost all the means of evidence available in a normal murder trial*”, including “*the bodies of the victims, autopsy reports, expert reports on the cause and time of death, [...] evidence as to the criminals, murder weapons, etc.*”,³ and after a detailed analysis of the course of the trial one cannot help but note that this Court, just like all those which dealt with the topic before and since, never made even the slightest effort to locate any such evidence or to commission any subject experts. The same goes no less for the great Majdanek Trial in Düsseldorf in the late 1970s.⁴

It was not until 1988, 45 years after the alleged crime, that Ernst Zündel, a German-Canadian charged by a Canadian court with knowingly disseminating false news about the Holocaust,⁵ commissioned the American gas chamber expert Leuchter to draw up a report about the evidence for the supposed murder weapon. The idea for such a report had been suggested to Zündel by Robert Faurisson, who already as early as 1978 published his thesis of the radical impossibility of human gassings in the

¹ F. A. Leuchter, *An Engineering Report on the Alleged Execution Gas Chambers at Auschwitz, Birkenau and Majdanek, Poland*, Samisdat Publishers, Toronto 1988, 195 pp. (online: www.zundelsite.org/english/leuchter/report1/leuchter.toc.html); German ed.: *Der erste Leuchter-Report*, *ibid.*, 1988; British ed.: *The Leuchter Report*, Focal Point Publications, London 1989, 67 pp.

² I intentionally put ‘gas chambers’ in quotation marks for the following reason: In the wartime German technical literature as well as in many blueprints of German architectural maps, this term was exclusively used to describe delousing facilities, but never in the context of homicide. Nevertheless, I do understand that whenever this term is used today, a homicidal ‘gas chamber’ is normally meant and/or understood. But since this is a corruption of the original term, I put it in quotation marks to distinguish it from the original term referring to delousing gas chambers, see note 32.

³ Verdict of the Frankfurt Auschwitz Trial, Ref. 50/4 Ks 2/63; cf. I. Sagel-Grande, H. H. Fuchs, C. F. Rüter (eds.), *Justiz und NS-Verbrechen*, v. XXI, University Press, Amsterdam 1979, p. 434.

⁴ District Court Düsseldorf, Ref. 8 Ks 1/75.

⁵ Regarding the trials cf. B. Kulaszka, *Did Six Million Really Die? Report of the Evidence in the Canadian ‘False News’ Trial of Ernst Zündel – 1988*, Samisdat Publishers, Toronto 1992 (online: www.zundelsite.org/english/dsmrd/dsmrdtoc.html); R. Faurisson, *Journal of Historical Review (JHR)* 8(4) (1988), pp. 417–431 (online: vho.org/GB/Journals/JHR/8/4/Faurisson417-431.html). The law under which E. Zündel was charged was quashed by the Supreme Court of Canada in spring 1993 as being in violation of human rights. The reason: no one other than the accused himself could possibly know whether the accused had knowingly told untruths (in other words, had lied or denied). Everyone must be granted the right to be wrong. This antediluvian law required the Court to be able to read minds, and was an elastic, ambiguous paragraph posing a dire threat to the free expression of opinion. The Court rejected subsequent motions to re-charge Zündel under other paragraphs. Zündel was thus acquitted of all charges.

alleged ‘gas chambers’ of Auschwitz.⁶ In the resultant, hastily drawn up report, Leuchter concluded that the “*alleged gas chambers*” of the facilities he examined could not have been used as such for several technical reasons. Additionally, analyses of brick samples from the alleged ‘gas chambers’ showed that these contain negligible traces of hydrogen cyanide poison from Zyklon B, whereas the walls of the delousing chambers where the inmates’ clothing was deloused with Zyklon B contain great quantities of such residue.

It is not surprising that this report caused considerable uproar, which resulted in a number of publications.⁷⁻²⁹ On the suggestion of the Leuchter Report, the Rudolf Report – drawn up in spring 1992,¹⁹

⁶ R. Faurisson, “*Es gab keine Gaskammern*”, Deutscher Arbeitskreis Witten, Witten 1978; R. Faurisson, “*Le camere a gas non sono mai esistite*”, *Storia illustrata*, 261 (1979), pp. 15-35 (Engl. online: vho.org/GB/Journals/JHR/2/4/Faurisson319-373.html); cf. R. Faurisson, “*The mechanics of gassing*”, *JHR*, 1(1) (1980) (online: abbc.com/aaargh/engl/FaurisArch/RF80spring.html), p. 23ff.; R. Faurisson, “*The gas chambers of Auschwitz appear to be physically inconceivable*”, *ibid.*, 2(4) (1981) pp. 313-317 (online: vho.org/GB/Journals/JHR/2/4/Faurisson312-317.html).

⁷ F. Finke, *Deutschland in Geschichte und Gegenwart (DGG)* 37(3) (1989), pp. 1-4.

⁸ J.-C. Pressac, *Jour Juif*, December 12, 1988, pp. I-X; also in S. Z. Shapiro (ed.), *Truth Prevails: Demolishing Holocaust Denial: The End of the Leuchter Report*, Beate Klarsfeld Foundation, New York 1990.

⁹ J.-C. Pressac, *Auschwitz: Technique and Operation of the Gas Chambers*, Beate Klarsfeld Foundation, New York 1989.

¹⁰ H. Auerbach, Institut für Zeitgeschichte, letter to the Bundesprüfstelle, Munich, Oct. 30, 1989; H. Auerbach, November 1989, published resp. in U. Walendy, *Historische Tatsachen (HT)* No. 42, Verlag für Volkstum und Zeitgeschichtsforschung, Vlotho 1990, pp. 32 and 34.

¹¹ J. Markiewicz, W. Gubala, J. Labedz, B. Trzcinska, published without knowledge of the authors and without the sampling protocol as “*An official Polish report on the Auschwitz ‘gas chambers’*” in *The Journal of Historical Review*, Summer, 11(2) (1991), pp. 207-216. (online: vho.org/GB/Journals/JHR/11/2/JHR207-216.html); their own publication appeared three years later: J. Markiewicz, W. Gubala, J. Labedz, *Z Zagadnien Nauk Sadowych*, Z. XXX (1994), pp. 17-27 (online: www.2.ca.nizkor.org/ftp.cgi/orgs/polish/institute-for-forensic-research/post-leuchter.report).

¹² Regarding critique of the report of J. Markiewicz *et al.* (note 11): G. Rudolf, *DGG* 43(1) (1995), pp. 22-26 (online: vho.org/D/Kardinal/Leuchter.html); English: vho.org/GB/Books/cq/leuchter.html); J. Markiewicz, W. Gubala, J. Labedz, G. Rudolf, correspondence, in *Sleipnir* (Verlag der Freunde, Postfach 35 02 64, D-10211 Berlin) 1(3) (1995), pp. 29-33; reprint in Herbert Verbeke (ed.), *Kardinalfragen zur Zeitgeschichte*, V.H.O., Postbus 60, B-2600 Berchem 1996 (online *ibid.*).

¹³ W. Wegner, in U. Backes, E. Jesse, R. Zitellmann (eds.), *Die Schatten der Vergangenheit*, Propyläen, Frankfurt/Main 1990, pp. 450ff. (online, including critiques by G. Rudolf: vho.org/D/dsdv/Wegner.html).

¹⁴ Regarding critiques of Jean-Claude Pressac, *op. cit.* (note 9): M. Weber, *JHR* 10(2) (1990), pp. 231-237 (online: vho.org/Journals/JHR/10/2/Weber231-237.html); C. Mattogno, *JHR* 10(4) (1990), pp. 461-485 (online: .../4/Mattogno461-486.html); R. Faurisson, *Revue d'Histoire Révisionniste* 3 (1990), pp. 65-154 (online: www.lebensraum.org/french/thr/pressac.pdf); Eng.: *JHR* 11(1) (1991), pp. 25-66; *JHR* 11(2) (1991), pp. 133-175; E. Aynat, *JHR* 11(2) (1991), pp. 177-206 (online: vho.org/Journals/JHR/11/2/Aynat177-206.html); A. R. Butz, *JHR* 13(3) (1993), pp. 23-37; W. Häberle, *DGG* 39(2) (1991), pp. 9-13 (online: vho.org/D/DGG/Haeberle39_2.html); W. Schuster, *ibid.*, pp. 13-17 (online: vho.org/D/DGG/Schuster39_2.html); U. Walendy, *HT* No. 50, Verlag für Volkstum und Zeitgeschichtsforschung, Vlotho 1991; Walendy, *HT* No. 52, *ibid.*, 1992; Walendy, *HT* No. 60, *ibid.*, 1993.

¹⁵ J. Bailer, in Dokumentationszentrum des österreichischen Widerstandes, Bundesministerium für Unterricht und Kultur (ed.), *Amoklauf gegen die Wirklichkeit*, Vienna 1991, pp. 47-52.

¹⁶ G. Wellers, *Dachauer Hefte* 7(7) (1991), pp. 230.

¹⁷ M. Weber, *JHR* 12(4) (1992-93), pp. 421ff. (online: ihr.org/jhr/v12/v12p421_Weber.html); P. Grubach, *ibid.*, pp. 445ff. (online: .../v12p445_Grubach.html).

¹⁸ E. Gauss, *DGG* 41(2) (1993), pp. 16 (Online: vho.org/D/DGG/Gauss41_2.html); E. Gauss, *Vorlesungen über Zeitgeschichte*, Grabert, Tübingen 1993 (online: vho.org/D/vuez/v1.html).

¹⁹ R. Kammerer, A. Solms, *Das Rudolf Gutachten*, Cromwell, London 1993 (an updated version is available online: vho.org/D/rga).

and expanded and revised several times²⁷ – focused on engineering and chemical aspects of the alleged ‘gas chambers’ in Auschwitz, and shall be summarized and supplemented in the following. The alleged ‘gas chambers’ of the concentration camp Majdanek, which were also a subject of the Leuchter Report, were briefly discussed in the German version of this contribution, but were replaced here by a far better contribution recently written by Carlo Mattogno (see next chapter). We shall dispense with an account of the ongoing debate about the interpretation of the documents found to date with respect to the issue of ‘gas chambers’ in Auschwitz, and, at least as interesting, with many other topics of this and related camps; serious readers are referred to the relevant literature.²⁷⁻³¹

- ²⁰ Aside from S. Z. Shapiro (ed.), *op. cit.* (note 8), other mostly polemical accounts of revisionist arguments have been published by the establishment: D.E. Lipstadt, *Denying the Holocaust: The Growing Assault on Truth and Memory*, Free Press, New York 1993; K. S. Stern, *Holocaust Denial*, American Jewish Committee, New York 1993; A. M. Schwartz, *Hitler's Apologists: The Antisemitic Propaganda of Holocaust "Revisionism"*, The Anti-Defamation-League, New York 1993; regarding the latter three titles, cf. T. J. O'Keefe, *JHR* 13(6) (1993), pp. 28-36.
- ²¹ J.-C. Pressac, *Les Crématoires d'Auschwitz, la Machinerie du meurtre de masse*, CNRS, Paris 1993; German: *Die Krematorien von Auschwitz: Die Technik des Massenmordes*, Piper, Munich 1994.
- ²² Critiques of Pressac, *op. cit.* (note 21); A.N.E.C., R. Faurisson, S. Thion, P. Costa, *Nouvelle Vision* 31 (1993), pp. 11-79; cf. R. Faurisson, *JHR* 14(1) (1994), pp. 23f.; R. Faurisson, “Réponse à Jean-Claude Pressac”, *R.H.R.*, Boîte Postale 122, 92704 Colombes Cedex 1994; H. Verbeke (ed.), *Auschwitz: Nackte Fakten*, Vrij Historisch Onderzoek, Berchem 1995 (vho.org/D/anf).
- ²³ Dr. J. Bailer, in B. Bailer-Galanda, W. Benz, W. Neugebauer (eds.), *Wahrheit und Auschwitzlüge*, Deuticke, Vienna 1995, pp. 111-118.
- ²⁴ Regarding critiques of J. Bailer, *op. cit.* (note 23), cf. G. Rudolf, “Zur Kritik an ‘Wahrheit und Auschwitzlüge’” in Herbert Verbeke (ed.), *op. cit.* (note 12) (online: vho.org/D/Kardinal/Wahrheit.html; English: vho.org/GB/Books/cq/critique.html).
- ²⁵ B. Clair, “Revisionistische Gutachten”, *Vierteljahreshefte für freie Geschichtsforschung (VffG)* 1(2) (1997), pp. 102f (online: vho.org/VffG/1997/2/Clair2.html); critiques of this: G. Rudolf, “Das Rudolf Gutachten in der Kritik”, *ibid.*, pp. 104-108 (online: .../RudGut2.html).
- ²⁶ Richard J. Green, “Leuchter, Rudolf and the Iron Blues”, April 25, 1998, and more thoroughly: “The Chemistry of Auschwitz”, May 10, 1998, The Holocaust History Project, www.holocaust-history.org/auschwitz/chemistry; regarding refutation cf. Germar Rudolf, “Das Rudolf Gutachten in der Kritik, Teil 2”, *VffG* 3(1) (1999), pp. 77-82, (online: .../1999/1/RudDas1.html); Engl.: “Some considerations about the ‘Gas Chambers’ of Auschwitz and Birkenau”, paper presented at the 1998 Revisionist Adelaide Conference (online: vho.org/GB/Contributions/Green.html; Greens reply: www.holocaust-history.org/auschwitz/chemistry/not-the-science/; my response to that: vho.org/GB/Contributions/CharacterAssassins.html).
- ²⁷ Latest issue: G. Rudolf, *Das Rudolf Gutachten*, 2nd ed., Castle Hill Publishers, Hastings 2001; online, also for updates, see vho.org/D/rga2; English: *The Rudolf Report*, Theses & Dissertations Press, Chicago, IL, 2003 (online: vho.org/GB/Books/trr).
- ²⁸ Robert Jan van Pelt, *The Pelt Report*, Irving vs. Lipstadt (Queen's Bench Division, Royal Courts of Justice, Strand, London, David John Cawdell Irving vs. (1) Penguin Books Limited, (2) Deborah E. Lipstadt, Ref. 1996 I. No. 113.
- ²⁹ For a detailed critique of van Pelt's flawed *The Pelt Report* see Germar Rudolf, “Gutachter- und Urteilsschelte”, *VffG* 4(1) (2000), pp. 33-50 (online: vho.org/VffG/2000/1/Rudolf33-55.html; Engl.: vho.org/GB/Contributions/RudolfOnVanPelt.html and .../CritiqueGray.html).
- ³⁰ Apart from my report cf. J.-C. Pressac, *op. cit.* (notes 9 & 21), R. Faurisson (note 14), H. Verbeke (ed.) (note 22), as well as the chapter by C. Mattogno and F. Deana, this volume. See also M. Gärtner, “Vor 25 Jahren: Ein anderer Auschwitzprozeß”, *VffG* 1(1)(1997), pp. 24f. (online: vho.org/VffG/1997/1/Gaertner1.html); Gärtner, “Volksverhetzung? Volksverhetzung?”, *VffG* 1(4)(1997), pp. 244f. (online: vho.org/VffG/1997/4/Gaertner4.html); Gärtner, A. Niepel, W. Rademacher, “Aus der Forschung”, *VffG* 1(4)(1997), pp. 265ff. (online: vho.org/VffG/1997/4/Niepel4.html); Gärtner, W. Rademacher, “Grundwasser im Gelände des KGL Birkenau”, *VffG* 2(1)(1998), pp. 2-12 (online: vho.org/VffG/1998/1/GaeRad1.html); Gärtner, A. Niepel, W. Rademacher, W. Meier und F. Schumacher “Aus der Forschung”, *VffG* 2(1)(1998), pp. 54ff. (online: vho.org/VffG/1998/1/Forsch1.html); J. Graf, C. Mattogno, *Concentration Camp Majdanek. A Historical and Technical Study*, Theses & Dissertations Press, Chicago, IL, 2003 (online: vho.org/GB/Books/ccm); H.J. Nowak, “Kurzwellen-Entlausungsanlagen in Auschwitz”, *VffG* 2(2) (1998), pp. 87-105 (online: vho.org/VffG/1998/2/Nowak2.html; see his contribution in this handbook); W. Rademacher, “Sauna ein Verbrechen?”, *VffG* 1(4)(1997), pp. 245ff. (online: vho.org/VffG/1997/4/Rademacher4.html).

2. Design of the Fumigation Facilities in Auschwitz

2.1. The Camp Complex of Auschwitz

According to Pressac⁹ the facilities of Auschwitz I/Main Camp were originally part of a barracks under the Dual Monarchy (later Poland) and were converted into a concentration camp after the war against Poland. After the start of the Russian Campaign, Auschwitz II/Birkenau was rebuilt as a prisoner-of-war camp of the Waffen-SS, to accommodate Russian prisoners-of-war. Later it increasingly used to house Jews, who were deported there from all German-occupied parts of Europe. The arrival of great numbers of people made for severe health-related problems in all camps. For this reason all the camps had extensive disinfection and delousing facilities. Since the end of the First World War, the general fumigant of choice for pest control (lice, bedbugs, fleas, beetles etc.) had been the product Zyklon B (hydrogen cyanide adsorbed onto diatomaceous earth or gypsum). In Compounds 1a/b of Birkenau, Buildings 5a and 5b each had a wing where one room was reserved for the delousing of material objects with hydrogen cyanide. These buildings are completely intact still today.

On the whole, historians today assume that the large cremation facilities in the camps did not serve only the purpose they had originally been intended for, namely the removal of victims of epidemics, which did occur quite frequently despite intensive efforts at disinfection. Later, they claim, these facilities were used instead or additionally for mass extermination, including that of the Jews. For this purpose, some rooms of the respective cremation facilities were allegedly slightly altered; people were then killed ('gassed') there with Zyklon B.

According to eyewitness testimony, there was at that time a homicidal 'gas chamber' in crematorium I of the Main Camp, Auschwitz I. In Birkenau (Auschwitz II), approximately 1.5 miles away, there are said to have been 4 more homicidal 'gas chambers' in crematoria II through V, as well as two farm houses, located outside the camp itself and altered for gassing purposes.

The individual facilities are discussed in the following.

2.2. Delousing Chambers for Material Objects

Rooms where material objects were deloused with Zyklon B still exist intact today in the West and East wings of Buildings 5a and 5b of Compounds B1a and b respectively. The original German building plans identify these rooms as "*Gaskammer*" (gas chamber),³² the term commonly used in those days for disinfestation facilities.³³ These delousing rooms, equipped with airlocks, had two round openings approximately 20 inches in diameter in their ceiling gables, fitted with an air intake and an exhaust ventilator. The roof had three ventilation chimneys; three furnaces were installed in these

vho.org/VffG/1997/4/Rademacher4.html); M. Gerner, "'Schlüsseldokument' ist Fälschung", *VffG* 2(3) (1997), pp. 166-174 (online: vho.org/VffG/1998/3/Gerner3.html), Carlo Mattogno, "*Morgue Cellars of Birkenau: Gas Shelters or Disinfesting Chambers?*" (www.russgranata.com/leichen.html), "*The Auschwitz Central Construction Headquarters Letter Dated 28 June 1943: An Alternative Interpretation*" (www.russgranata.com/lalett.html); "*Sonderbehandlung' and Crematory II'*" (www.russgranata.com/sonder.html), to name only a few.

³¹ S. Crowell, "*Technik und Arbeitsweise deutscher Gasschutzbunker im Zweiten Weltkrieg*", *VffG* 1(4) (1997), pp. 226-244 (online: vho.org/VffG/1997/4/Crowell4.html); for a list of English articles on that cf. the entry "Crowell, Samuel" at vho.org/i/a/C.html.

³² Blueprints of Buildings 5a/b: J.-C. Pressac, *op. cit.* (note 9), pp. 55-8; photos of the exterior, pp. 59f.; in 1943 Building 5a was altered to serve as hot-air delousing facility; cf. G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 73-78.

³³ See, e.g., the title of a well known and widespread book of these times: F. Puntigam, H. Breymesser, E. Bernfus, *Blausäuregaskammern [sic!] zur Fleckfieberabwehr*, Sonderveröffentlichung des Reichsarbeitsblattes, Berlin 1943. Emphasis added by the author; J. Graf and C. Mattogno, *CC Majdanek*, *op. cit.* (note 30), and H.J. Nowak, *op. cit.* (note 30) have found more examples for the use of the term "*Gaskammer*".

rooms during the time they were in use.³⁴ This set-up, with heating and ventilation, must have been considered the minimum requirement for a facility to be used as fumigation chamber for disinfesting material objects safely.

2.3. The ‘Gas Chamber’ in Main Camp Auschwitz I

According to Pressac, there is no material or documentary evidence for the existence of a homicidal ‘gas chamber’ in the crematorium of the Main Camp; there are, however, numerous eyewitness accounts.³⁵ Pressac states that the foremost characteristics of these accounts are their numerous contradictions, technical impossibilities, and generally unbelievable nature.³⁶ In his latest work, Pressac suggests that this homicidal ‘gas chamber’ was in operation only from January to April 1942, and he calls eyewitness statements alleging a longer time of operation “exaggerations”.³⁷

In considering this crematorium we shall concentrate on the Zyklon B input hatches and the ventilation holes of the homicidal ‘gas chamber’.³⁸ *Illustration 1* shows the floor plan of the building at the start of the war, designed and constructed as an ordinary crematorium with a mortuary.³⁹ The mortuary is said to have been altered later to serve as ‘gas chamber’. For purposes of introducing the Zyklon B into the room to effect the gassing of the victims, 3 or 4 hatches are also said to have been cut into the roof later on, as well as 1 or 2 others to accommodate powerful ventilators.⁴⁰ In autumn of 1944 the crematorium was altered to serve as air-raid shelter,⁴¹ while the Zyklon B input hatches allegedly were already sealed up in late April or early May 1942.⁴²

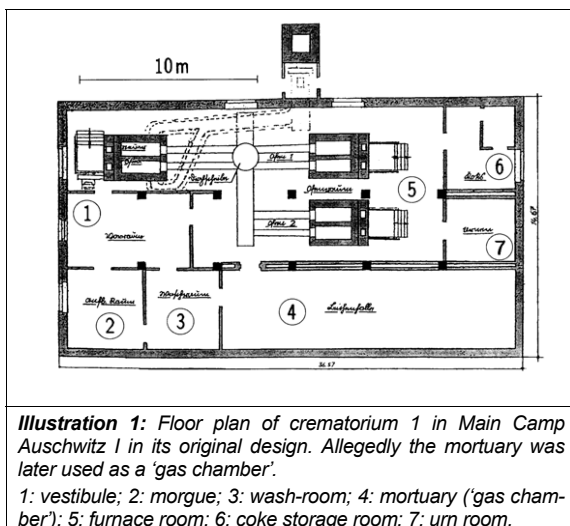


Illustration 1: Floor plan of crematorium 1 in Main Camp Auschwitz I in its original design. Allegedly the mortuary was later used as a ‘gas chamber’.
1: vestibule; 2: morgue; 3: wash-room; 4: mortuary (‘gas chamber’); 5: furnace room; 6: coke storage room; 7: urn room.

³⁴ J.-C. Pressac, *op. cit.* (note 9), p. 53.

³⁵ *Ibid.*, p. 123.

³⁶ *Ibid.*, pp. 126–128; Pressac, *op. cit.* (note 21), p. 2.

³⁷ Pressac, *op. cit.* (note 21), pp. 34f.; critiques especially regarding Pressac’s shifting of the alleged first gassing in Auschwitz were published by C. Mattogno, *Auschwitz: La Prima gasazione*, Edizioni di Ar, Via Falloppio 83, I-Padova 1992.

³⁸ First discussed by D. Felderer, *JHR* 1(3) (1980), pp. 255–266 (online: ihr.org/jhr/v01/v01p255_Felderer.html); see thoroughly C. Mattogno, “Keine Löcher, keine Gaskammer(n)”, *VffG* 6(3) (2002), pp. 284–304 (online: who.org/VffG/2002/3/Mattogno284-304.html).

³⁹ J.-C. Pressac, *op. cit.* (note 9), pp. 151ff.

⁴⁰ *Ibid.*, pp. 131f., contradicting P.S. Broad, the most important witness regarding this ‘gas chamber’ aside from the heavily tortured R. Höß (cf. R. Butler, *Legions of Death*, Arrows Books Ltd., London 1986, pp. 236f.; cf. R. Faurisson, *Annales d’Histoire Révisionniste* 1 (1987) pp. 137–152 (online: abbc.com/aaargh/fran/archFaur/1986-1990/RF8703xx1.html); D. Irving, *Nuremberg. The Last Battle*, Focal Point, London 1996, pp. 241–246. Broad claims to have seen six such openings: B. Naumann, *Auschwitz*, Athenäum, Frankfurt/Main 1968, p. 217; Hans Aumeier, temporarily commander of the camp, remembered “two to three air vents”, Statement Hans Aumeier, June 29, 1945, Public Record Office, WO 208/4661, p. 3ff., acc. to Robert Jan van Pelt, *op. cit.* (note 28), p. 154 (1/2 to 1 min.).

⁴¹ J.-C. Pressac, *op. cit.* (note 9), p. 156.

⁴² J.-C. Pressac, *op. cit.* (note 21), p. 39.

Illustration 2 shows the floor plan of the crematorium as it exists today.⁴³ After the war, it is claimed the roof was recovered with roofing felt, which concealed the Zyklon B hatches of this ‘gas chamber’. The input hatches visible today were installed after the war by the Polish Auschwitz Museum – not, according to Pressac, at their original location, but rather in a way that was considered more effective for tourist viewing purposes.⁴⁴ This alteration and many others carried out by the communist post-war administration of the camp, which we can discuss here only briefly, are generally acknowledged as “falsifications” today.⁴⁵

However, the ceiling, outside walls and pillars as well as the building foundation are in their original state. If openings for input hatches and ventilation facilities had existed in the reinforced concrete roof, damage to the concrete structure would have to be visible at the appropriate spots on the unplastered inside ceiling, since such structures cannot be removed without leaving visible traces.

At one location the ceiling clearly shows signs of disintegration caused by water seeping in. Attempts have been made – in vain – to check the decay by plastering over the area affected. There are two other places where the ceiling is plastered over, in the middle of the room and towards the outside wall. Whether these patches cover up former holes or whether they are also the result of repairs is something that yet needs to be investigated. In any case they are not input openings distributed evenly throughout the room. Other than those that were added after the war, there are no such breaches in the ceiling.

Might the Auschwitz Museum have been mistaken, and used the old openings as the locations of the newly installed ones after all? The former Director of the Museum recently commented to this effect.⁴⁶ We shall take a closer look at his revised opinion.

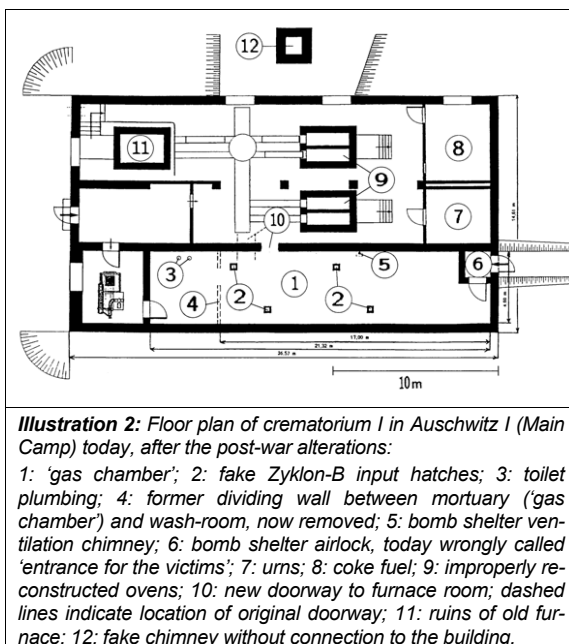


Illustration 2: Floor plan of crematorium I in Auschwitz I (Main Camp) today, after the post-war alterations:

1: ‘gas chamber’; 2: fake Zyklon-B input hatches; 3: toilet plumbing; 4: former dividing wall between mortuary (‘gas chamber’) and wash-room, now removed; 5: bomb shelter ventilation chimney; 6: bomb shelter airlock, today wrongly called ‘entrance for the victims’; 7: urns; 8: coke fuel; 9: improperly reconstructed ovens; 10: new doorway to furnace room; dashed lines indicate location of original doorway; 11: ruins of old furnace; 12: fake chimney without connection to the building.

⁴³ J.-C. Pressac, *op. cit.* (note 9), p. 159.

⁴⁴ *Ibid.*, p. 133; J.-C. Pressac, *op. cit.* (note 21), p. 34.

⁴⁵ Cf. the French Jew Eric Conan, scholar at the famous French National Center of scientific research (CNRS): “Autre sujet délicat: que faire des falsifications léguées par la gestion communiste? [...] Tout y est faux” [Another delicate subject: what to do with the falsifications left behind by the communist administration? ... Everything there [at crematorium I] is false.], “Auschwitz: La Mémoire du Mal”, *L’Express*, 19/25.1.1995; Robert van Pelt, Deborah Dwork, *Auschwitz: 1270 to the Present*, Yale University Press, New Haven and London 1996, pp. 363f.; cf also Carlo Mattogno’s review “Architektonische Stümpereien zweier Plagiatoren”, *VffG*, 4(1) (2000), pp. 25-33 (online: vho.org/VffG/2000/1/Mattogno25-33.html; English: “Auschwitz 1270 to the Present”, www.russgranata.com/irving.html).

⁴⁶ F. Piper, in an interview with D. Cole, B. Smith, Visalia, CA, 1992; cf. *JHR* 14(2) (1993), pp. 11ff.

The breaches visible in the concrete today are not plastered, nor have the remnants of the severed iron reinforcement bars been properly removed. The holes are fitted with a makeshift wooden frame, and sealed with tar. Such sloppy work does not reflect the care required in handling poison gas, nor is it typical of German workmanship. If the SS had indeed cut these holes through the concrete, one might expect not only a proper removal of the reinforcing bars, but also a uniform arrangement of the 4 hatches over the ceiling of the *original* mortuary to allow for the even distribution of Zyklon B in the room. The hatches present today, however, are spread evenly over the ceiling only if one regards the washroom, which was not added to this room until *after* the war, as being part of the mortuary (alleged homicidal ‘gas chamber’); see *illustration 2*. The configuration of the input hatches, therefore, makes sense only if they were added specifically for the facilities as they exist today as “*falsifications*” of incorrect dimensions, *i.e.*, if they were added *after* the war.

In his new book Pressac states that temporary ventilation facilities were installed in the mortuary of crematorium I in March 1941, that these were never replaced with permanent fixtures, and that it is not known how they worked.⁴⁷ To support this claim Pressac cites Pery Broad,⁴⁸ whose statements Pressac had dismissed as implausible in his first book⁴⁹ and which, furthermore, tell of a ventilator installed in a concrete chimney. But just as the Zyklon B input hatches, this ventilator would have had to leave detectable traces in the ceiling. It is also possible, however, that the ventilation pipe was laid through breaches in the walls, into the oven room and on from there, for example to the chimney. But since the dividing wall between the oven room and the mortuary were extensively rebuilt when the facilities were altered to serve as air-raid shelter, no traces remain to be found today.

One can conclude from all this that in all likelihood there were no hatches for the input of Zyklon B to allow these facilities to be used as homicidal ‘gas chamber’ at the time of their alleged use as such. Or, as French Professor Robert Faurisson put it: “*No holes, no ‘Holocaust’.*”

Additionally, there was no direct entrance door from outside through which the alleged victims could have entered the homicidal ‘gas chamber’. Therefore all eyewitness accounts stating that the victims were led into the ‘gas chamber’ through such a door, are dubious. Or, as French Professor Robert Faurisson put it: “*No door, no ‘destruction’.*”

2.4. The ‘Gas Chambers’ of Birkenau

2.4.1. Crematoria II and III

In terms of size, fittings and construction, these crematoria are comparable with other civilian cremation facilities built in the Reich at that time, as well as with modern ones.⁵⁰ Details of the construction of mortuary 1, allegedly used as homicidal ‘gas chamber’, have already been discussed elsewhere.^{9,18f,21f,27,31f,51} We shall again focus on the Zyklon B input hatches, *i.e.*, holes in this basement room, which was equipped with ventilation but no heating facilities.

Illustration 3 (next page) shows the floor plan of mortuary 1 (the ‘gas chamber’) of crematorium II and also represents the mirror image of mortuary 1 of crematorium III; *illustration 4* shows the cross-

⁴⁷ J.-C. Pressac, *op. cit.* (note 21), pp. 18, 60f.

⁴⁸ *Ibid.*, p. 18; for Broad’s report cf. B. Naumann, *op. cit.* (note 40), pp. 200ff; regarding critiques of Broad’s statement: J. Graf, *Auschwitz. Tätergeständnisse und Augenzeugen des Holocaust*, Neue Visionen Verlag, Postfach, CH-8116 Würenlos 1994, pp. 168-176.

⁴⁹ J.-C. Pressac, *op. cit.* (note 9), pp. 126ff.

⁵⁰ For a comparison, consider the construction of modern crematoria: H.-K. Boehlke, *Friedhofsbauten*, Callwey Verlag, Munich 1974, p. 117; E. Neufert, *Bauentwurfslehre*, Ullstein Fachverlag, Frankfurt 1962, pp. 423f.

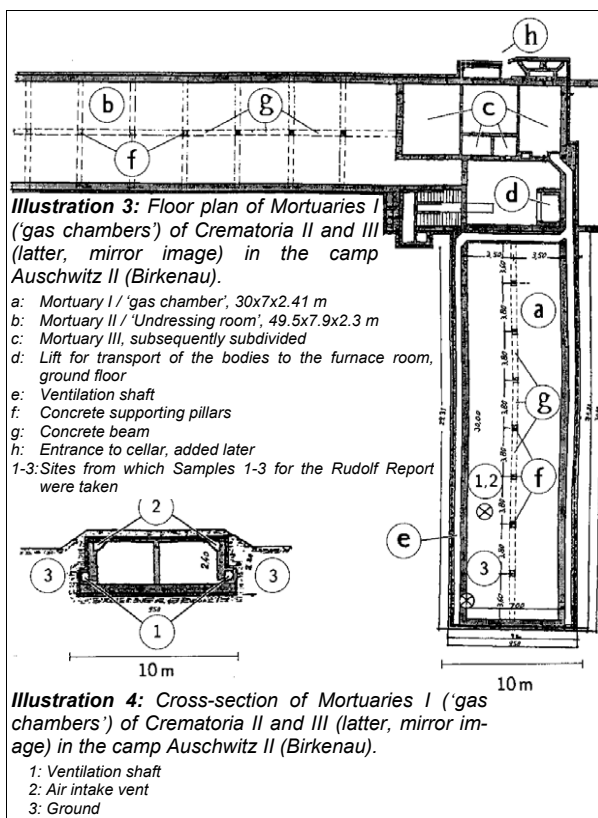
⁵¹ Cf. also Lüftl’s critique of the Jagschitz Report in the chapter by W. Rademacher, this volume.

section.⁵² According to eyewitnesses, there were also three or four hatches in the ceiling here, through which the Zyklon B was introduced.⁵³

Regarding the evidence provided by Allied air photos, the reader is referred to the chapter by J.C. Ball in the present volume. Clearly this information suggests that either there were no input hatches on the roofs, or that these were so small that they did not show up on the air photos, so that probably someone deemed it necessary to resort to photo retouching in order to falsify the air photos accordingly.

Today the roofs of mortuaries 1 (the 'gas chambers') of both crematoria are broken and collapsed. There are no signs of shell impacts. It is assumed that these rooms were blasted.⁵⁴ The ceiling of mortuary 1 ('gas chamber') of crematorium II is still more or less intact and still rests partially on the concrete supporting pillars. Large parts of the walls and concrete ceiling still accessible in the interior of the cellar remain in their original state, protected from weathering. There are no visible signs of any erosion or corrosion.

In his book Pressac shows pictures of ventilation pipe openings in the roof of mortuary 2 of crematorium II as well as in the concrete ceiling of the oven room of crematorium III.⁵⁵ *Illustration 5* shows one of the five openings into the oven room. In contrast to these cleanly cut holes, the only two holes to be found in the roof of mortuary 1 ('gas chamber') of crematorium II, which Pressac claims to allegedly have been Zyklon B input hatches, are clearly openings that were broken through the reinforced-concrete roof later (see *illustrations 6 and 7*). Pressac and van Pelt concede that these are the only holes visible today.⁵⁶



⁵² J.-C. Pressac, *op. cit.* (note 9), pp. 319-329. Building plans for crematoria II and III.

⁵³ For the most graphic description, cf. the testimony of Schultze, engineer with the firm Topf & Söhne, in a KGB interrogation; cf. G. Fleming in *The New York Times*, July 18, 1993, p. E19; *Der Spiegel* 40/1993, p. 154.

⁵⁴ Oddly enough, in the basement of crematorium II, in the vestibule leading to the mortuaries, one finds a good number of gardening tools (shovels, spades etc.) partly covered by rubble. One would expect that in an orderly evacuation and subsequent demolition of the building the Germans would have taken these tools with them.

⁵⁵ J.-C. Pressac, *op. cit.* (note 9), pp. 365f.

⁵⁶ *Ibid.*, p. 354. It is significant that in his new book, *op. cit.* (note 21), Pressac simply ignores the problem of the Zyklon B input hatches and the indispensable, but missing, holes in the concrete ceiling. Van Pelt, *op. cit.* (note 28), p. 295.



Illustration 5: Cleanly cut ventilation hole in the ceiling of the furnace room, opening into upper story. Note the damage caused by blasting.



Illustration 6: Alleged Zyklon B input hatch in the roof of mortuary 1 ('gas chamber') of crematorium II; entrance to part of the cellar still accessible today.



Illustration 7: Alleged Zyklon B input hatch in the ceiling of mortuary 1 ('gas chamber') of crematorium II. It is clearly visible that the reinforcing bars in the reinforced concrete were not even removed; they were merely bent back.



Illustration 8: Notch (fatigue) effect resulting at inserted openings from the application of force. The only crack running through the wall proceeds, naturally enough, from the corner of the window.⁵⁷

Without exception the openings visible today in the roofs of mortuaries 1 ('gas chambers') of crematoria II and III are holes that were broken through the concrete after completion of the roofs. If any of these holes had served as Zyklon B input hatches, then they would have to have been added after the roofs were completed. Since the roofs of these facilities were poured in the winter of 1942/43,⁵⁸ any additional openings could have been added to the roofs of both crematoria in spring 1943 at the earliest. But the mass extermination in the facilities of crematorium II is said to have been in full swing by then. This would imply an inconceivably stupid error in planning.

Also, given such an opening broken through the roof of one of the mortuaries 1 ('gas chambers') after construction, i.e., causing damage to the concrete and the iron reinforcement structure, it would have been inevitable for the ceiling breaks and cracks resulting from a subsequent blasting of the building to run primarily through these holes. The reason for this is that blasting represents an abnormal force, that material tension reaches very high peak levels around the corners of inserted openings (notch or fatigue effect), and that cracks proceed preferentially from weak points. Therefore, particu-

⁵⁷ *Kurier*, August 30, 1992, p. 20: "Wenn Felsen fallen" (When rocks are falling).

⁵⁸ J.-C. Pressac, *op. cit.* (note 9), pp. 338f. In his new book, *op. cit.* (note 21), Pressac reproduces a large photo showing an outside view of the ceiling of mortuary 1 of crematorium II, taken in winter 1943 (Document 27) – without any trace of an input hole!

larly such openings whose belated addition has already damaged the structure of the surrounding concrete represent points where cracks and breaks are not only likely, but inevitable. This is demonstrated by *illustrations 5 and 8* (previous page). Even though, in *illustration 5*, the explosion pressure in the ground-level oven room was able to escape in every direction and the ceiling connecting to the upper floor remained almost fully intact, three of the five oven room air vent holes, which had been neatly cast into the concrete ceiling and reinforced, were completely destroyed. Clearly visible cracks formed at the corners of two other holes, shown in the photos reproduced by Pressac.⁵⁵ *Illustration 8* shows the consequences of a rockfall on a house wall with a window. The only crack in the wall proceeds from the window.

In the mortuaries of crematoria II and III the pressure from the explosion could only escape upward, which is why their ceilings were much more severely damaged than the ceiling of the oven room or the wall of the house hit by a rockfall. The alleged Zyklon B input hatches in the roof of mortuary 1 ('gas chamber') of crematorium II, however, are conspicuous for their relatively undamaged condition; none of the many cracks and breaks in the ceiling run through the hole shown in *illustration 7*. An on-site examination reveals the random arrangement of openings in places where the mortuary ceiling is actually undamaged! As John C. Ball shows in this volume, in terms of size or location these holes also do not correspond at all with the patches apparent on the air photos – something which even Pressac has realized.⁵⁹

What is more, at the opening shown in *illustration 7* the reinforcement bars were only cut through once and then bent back. They are still full length. It would be quite possible to bend them back down and weld them to the protruding stubs at left (covered in snow), although we advise no one to try it in order to avoid any damage to these extremely important pieces of evidence.⁶⁰ Remnants of the reinforcement bars are also still visible at the edge of the hole in *illustration 6*. No devices for the introduction of gas could ever have been securely installed, much less sealed to the outside, in such crudely cut and unfinished holes from which not even the reinforcement bars had been removed. Any attempt to do so would have endangered the entire vicinity, including the alleged perpetrators, with the poison gas that would have escaped in enormous quantities. What is more, only brute force could have stopped the supposed victims from escaping through these holes or even throwing the poison gas carrier out, since after all these holes could never have served as input hatches – they were never finished.

One can therefore conclude with absolute certainty that the alleged input hatches were not added until after the buildings had been blown up, *i.e.*, after the German retreat.⁶¹ So, here as well the saying of Prof. Robert Faurisson goes: "*No holes, no 'Holocaust'*".

Thus, the alleged hatches shown in pictures as published by Pressac⁶² and Czech⁶³ (cf. *illustration 9*, enlarged in *illustration 10*, next page), must be interpreted differently. If these objects were indeed Zyklon B hatches, as Pressac assumes, they should be of equal size and equidistant, *i.e.*, evenly distributed on the roof of morgue 1. But as shown in *illustration 10*, the objects have different sizes. According to their shades, they probably have a rectangle shape, but not the same orienta-

⁵⁹ J.-C. Pressac, *op. cit.* (note 9), p. 436.

⁶⁰ The Australian revisionist Fredrick Toben broke one of the bars off by trying to bend it back in May 1997; cf. the new image of this hole as taken by Toben after his destructive action on the internet: www.air-photo.com.

⁶¹ Currently funds are being raised for intended conservation work to be performed on the buildings of the concentration camp Auschwitz: "*Neue Inschrift im KZ Auschwitz, 60 Millionen für die Erhaltung*", *Allgemeine Jüdische Wochenzeitung*, June 6, 1992, p. 1. If this project should really be carried out, it would represent a destruction of evidence before any extensive international forensic investigations of the site have ever been carried out.

⁶² J.-C. Pressac, *op. cit.* (note 9), p. 340, dated roughly Feb. 9-11, 1943.

⁶³ D. Czech, *Kalendarium der Ereignisse im Konzentrationslager Auschwitz-Birkenau 1939 - 1945*, Rowohlt, Reinbek 1989, p. 454.

tion. When evaluating their possible position on the roof by means of a perspective drawing, *illustration 11*, it turns out that they are standing closely together and are most likely situated all together on one and the same half of the roof. If there were holes under these objects going through the roof, then they should still be there today, but there are no traces of such holes. This is proof that these objects cannot have been Zyklon B hatches. Maybe they are just some sort of building material placed on the roof, since this crematorium was still under construction in February 1943.

Besides this, it should be noted that these objects are not visible on similar ground level photos from Jan. 20, 1943,⁶⁴ and summer 1943.⁶⁵



Illustration 9: Photography of crematorium II in Birkenau, February 1943.

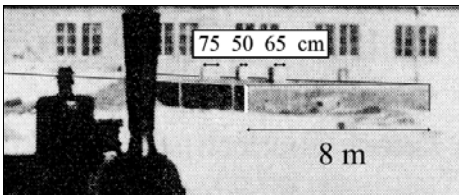


Illustration 10: Enlargement of illustration 9. The width of all three objects vary between 50 and 75 cm. Additionally the shades are different, indicating a different position and maybe a different shape/material.

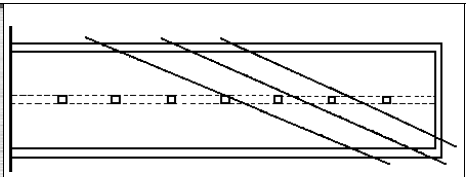


Illustration 11: cross section of morgue 1 of crematorium II. Perspective vanishing lines of objects, i.e., their possible locations, drawn in as crossing lines.⁶⁶

2.4.2. Crematoria IV and V

All that exists for these facilities⁶⁷ are a few documents and contradictory, partly unbelievable eyewitness statements.⁶⁸ According to Pressac, the two western, heated, unidentified rooms, as well as their anterooms, served as ‘gas chambers’. There is no evidence for any ventilation facility for these rooms prior to May 1944. For this reason Pressac suggests that up to that date ventilation was achieved by means of natural draft. In crematorium IV, but not in crematorium V, a ventilation facility is said to have been installed in May 1944, when the extermination of the Hungarian Jews allegedly began.⁶⁹ Pressac shows a blueprint for this, but fails to cite a source for it. According to his blueprint, the ventilation shaft would have opened into an additional chimney of crematorium IV. How-

⁶⁴ D. Czech, *op. cit.* (note 63), p. 398, and J.-C. Pressac, *op. cit.* (note 9), p. 335.

⁶⁵ J.-C. Pressac, *op. cit.* (note 9), p. 341, even if Pressac states here that they are visible. He must have been drunken when writing this, as he frequently was, see his confession, *ibid.*, p. 537.

⁶⁶ Taken from Jean-Marie Boisdefeu, *La controvers sur L'extermination des Juifs par les Allemands*, vol. 1, V.H.O., Berchem 1994, p. 168.

⁶⁷ For blueprints of these facilities, see G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27) p. 135.

⁶⁸ J.-C. Pressac, *op. cit.* (note 9), pp. 379ff., section about crematoria IV and V.

⁶⁹ J.-C. Pressac, *op. cit.* (note 21), pp. 89f.

ever, such a chimney is not visible on the air photos of May, June and September 1944.⁷⁰ As well, and strangely enough, the rooms described as ‘gas chambers’, beside the coke fuel and the physician’s rooms, lack any ventilation chimneys – unlike all the other rooms in the two crematoria. Pressac himself points out that the lack of ventilation of the chambers would have resulted in the gas spreading through the entire rest of the building, so that all work would have had to cease for many hours.⁷¹ He adds further that due to the technical inadequacies, the gassings in these rooms must have been a ludicrous procedure resembling a circus act.⁷²

Unfortunately one must deal with such witness stories and try to keep a straight face in the process.

2.4.3. Farm Houses (‘Bunkers’) I and II

The location and design of the redesigned farm houses (‘Bunkers’) and undressing barracks, allegedly situated west to northwest of the Birkenau camp, are not precisely known.⁷³ Pressac describes the eyewitness testimony in this respect as contradictory.⁷⁴ The building called Farm House (or Bunker) II is sometimes visible on air photos,⁷⁵ whereas there is never any trace of Farm House I.⁷⁶ Since the gassings attested to for these facilities resemble those for crematoria IV and V (input chutes at the side, no ventilation, but no heating either), our remarks in Section 2.4.2. apply all the more strongly in this case. In his new book Pressac even goes one better. He shows⁷⁷ that, due to a paper authored by G. Peters,⁷⁸ the Camp Administration had been aware of the advanced *delousing* technique using Zyklon B since 1941. Without documenting his reasoning, he interprets the Camp Administration’s interest in this paper to the effect that this new technique of killing *human beings* was to have been implemented in Bunker II, which was due for alteration. In the end, however, according to Pressac’s unfounded allegations, they refrained from doing so because the suppliers allegedly had difficulties in keeping up with the demand, and so Bunker II, like Bunker I, was operated without heating or ventilation.

A nugget of absurdity truly worth savoring: the Camp Administration, while being fully aware of the advanced methods available for Zyklon B *delousing* facilities, allegedly resorted to sledgehammer methods to gas people not only in Bunkers I and II, but later on in all other crematoria as well, while at the same time there were no noteworthy production delays to interfere with the construction of hundreds of advanced delousing chambers throughout German occupied Europe, and even in the new central sauna of Auschwitz-Birkenau! The Germans even developed the nowadays well-known microwave technology – *to kill lice!* They installed those extraordinarily expensive facilities exclusively in Auschwitz to *save* the lives of the inmates!⁷⁹ And we are to believe that the

⁷⁰ J. C. Ball, *Air Photo Evidence*, Ball Resource Services Ltd., Delta, B.C., Canada, 1992, pp. 69ff.

⁷¹ J.-C. Pressac, *op. cit.* (note 21), pp. 67, 89.

⁷² J.-C. Pressac, *op. cit.* (note 9), p. 386.

⁷³ Alleged ruins of the foundations of Farm House II are the only traces remaining today, J.-C. Pressac, *op. cit.* (note 9), p. 176.

⁷⁴ *Ibid.*, pp. 161ff.

⁷⁵ See the chapter by J. C. Ball, this volume.

⁷⁶ However, according to personal communication from Michael Gärtner, there does exist a document from the SS Camp Administration ordering the installation of a *delousing* facility in an existing farm house in Birkenau, which would indicate that there might be a true core to the gassing rumors: Obviously, this facility served as a delousing chamber. An article about that is in preparation and should appear in *VfG* soon.

⁷⁷ J.-C. Pressac, *op. cit.* (note 21), pp. 41f.

⁷⁸ G. Peters, E. Wüstinger, “*Entlausung mit Zyklon Blausäure in Kreislauf-Begasungsanlagen*”, *Zeitschrift für hygienische Zoologie und Schädlingsbekämpfung* 10/11 (1941).

⁷⁹ See H.J. Nowak, *op. cit.* (note 30), and his contribution in this handbook; a more recent synopsis about the general efforts of the German authorities to save the inmates’ lives was published by M. Weber, “*High Frequency Delousing*

Germans couldn’t get hold of the material required to install proper Zyklon B delousing technology in their homicidal ‘gas chambers’?

2.5. Engineering Conclusions

Since every room can be deloused with Zyklon B, every room could be considered as serving as a delousing facility in principle. But even the most primitive delousing facilities which were used more than just occasionally – whether in the early days of Auschwitz, or elsewhere – would have been equipped with an exhaust ventilator and frequently even with a heating system, of which the latter is helpful but not absolutely necessary (for details see Section 4.1.). No room, however, which lacked a ventilation system need be seriously considered as a facility for killing human beings with poisonous gas. For execution ‘gas chambers’, there must be a way to introduce the poison gas substance from outside, which is not absolutely necessary, but also helpful, in the case of delousing chambers for material objects. The salient point, therefore, is that a room that had either no means for introducing the poison gas from outside, or no ventilation facilities, cannot be seriously considered as execution ‘gas chamber’. An overview of the rooms discussed here is reflected in Table 1.

Table 1: Facilities and Suitability of Fumigation Chambers

Location \ Property	Poison Gas Input	Heating	Ventilation	Suitable as Delousing Chamber	Suitable as Execution Chamber
Delousing Chambers	○	●	●	yes	if equipped with input
Crematorium I	×	×	○	hardly/perhaps	no
Crematoria II & III	×	×	●	perhaps	no
Crematoria IV & V	●	●	×	hardly	hardly
Farm Houses I & II	○	× / ○	× / ○	hardly/perhaps	no

● = present; ○ = possibly present; × = not present

This does not even consider, among other things, that a hypothetical execution ‘gas chamber’ would need to be proof against victims attempting to break out (e.g., a massive iron gas-tight door opening outward), and that the ventilation system would have to be powerful enough for its task.

Even though the literature largely agrees on the outfitting of the rooms of crematoria IV and V as well as of the Farm Houses, the matter is nevertheless somewhat speculative due to a lack of documentation and material evidence. Pressac’s recent discovery regarding crematorium IV’s alleged ventilation system of unknown properties pertains only to the time after May 1944 and strikes us as no less speculative.⁸⁰

Fortunately, precisely that so-called ‘gas chamber’ in which the most people were allegedly killed with poison gas during the Third Reich has survived to the present in an almost perfectly intact state: mortuary 1 of crematorium II. It is an engineering certainty that, contrary to all eyewitness testimony, these facilities had no Zyklon B input openings in their ceiling during the time of their alleged operation.⁸¹ And if this is so, then this room cannot have been used as site for mass murder with poison gas.

Facilities at Auschwitz”, *The Journal of Historical Review*, 18(3) (1999), pp. 4-13 (online: ihr.org/jhr/v18/v18n3p-4_Weber.html).

⁸⁰ In *VffG* some new findings about these facilities will be published shortly.

⁸¹ A more detailed review of the state of knowledge about the ceiling of mortuary 1 of crematorium II and its missing holes, including an analysis of several ground and air photos, is to appear in *VffG* shortly.

Until and unless the question of how the poison gas substance should have been introduced into this putative ‘gas chamber’ is answered, all further speculations as to the nature of the killings and the possible chemical evidence for them are merely academic exercises without substance. *Therefore the discussion of Auschwitz could well end right here.* The following, however, discusses some of the questions of a chemical nature that have been raised by Leuchter.

3. Zyklon B and Its Effects

3.1. The Poison Gas Hydrogen Cyanide (HCN)

Hydrogen cyanide (HCN) blocks the oxygen supply to the cells, preventing the oxidation processes vital for cell life.⁸² Due to the brain’s great sensitivity to lack of oxygen, a person who has inhaled high concentrations of HCN suffers less (but still intensively) than a person who has swallowed cyanide salts (e.g., KCN), which results in heavy and extremely painful muscle cramps. This is the reason why this method of HCN execution is used in some states in the USA. A dose of 1 mg HCN per kg body weight is generally considered fatal, whereas non-lethal doses of HCN are quickly eliminated by the body without further consequences. The bright red color of the blood and of the cadaveric lividities are typical post-mortem findings in HCN-related deaths.⁸³

It is generally advisable to avoid perspiring when dealing with HCN, since damp skin absorbs HCN most readily. In cases of poisoning via the skin, concentrations of 0.6%/vol. are hazardous, and a few minutes’ exposure to 1%/vol. may be fatal.⁸⁴

Table 2 shows which concentration of HCN in air can be rapidly fatal to humans. Naturally these values are not the results of experiments on humans, but projections based, for safety reasons, on the lower safety limit. To demonstrate: a stout person weighing 100 kg (roughly 220 lbs.) must absorb approximately 100 mg HCN for this to be fatal. The respiration rate of a person at rest is about 15 liters of air per minute.⁸⁵ Given a HCN concentration of 0.02%/vol. (approximately 0.24 mg/liter), the victim must breathe in about 416 liters of air before he has absorbed the fatal dose of HCN. At 15 liters per minute, this would take just under half an hour. If he has a robust constitution, he may survive even this exposure time. If, however, one postulates a sensitive person of only 50 kg body weight (approximately 110 lbs.), whose respiration rate has increased to 40 liters per minute due to hard work or excitement, then the fatal 208 liters of air will have been breathed in by this person within 5 minutes. These mathematical examples show that safety guidelines are always set in such a way as to protect even the smaller and weaker persons from harm under a kind of worst case scenario. Also, the specifications given in the literature, “*immediately*” and “*rapidly fatal*”, are so indefinite as to be unsatisfactory.

The limiting values look very different when the requirement is that even the most robust among the hypothetical victims must *be dead* after a few minutes.⁸⁶ Naturally the concentration required for this greatly exceeds the values cited in Table 2. It could be determined accurately only by mass

⁸² More specifically: the cyanide. To avoid confusing the reader with specialized terminology we shall use the term ‘hydrogen cyanide’ wherever possible in the following, and ask the experts to kindly pardon the generalization.

⁸³ W. Wirth, C. Gloxhuber, *Toxikologie*, Georg Thieme Verlag, Stuttgart 1985, pp. 159f.; W. Forth, D. Henschler, W. Rummel, *Allgemeine und spezielle Pharmakologie und Toxikologie*, Wissenschaftsverlag, 5th ed., Mannheim 1987, pp. 751f.; S. Moeschlin, *Klinik und Therapie der Vergiftung*, Georg Thieme Verlag, Stuttgart 1986, p. 300; H.-H. Wellhöner, *Allgemeine und systematische Pharmakologie und Toxikologie*, Springer Verlag, Berlin 1988, pp. 445f.

⁸⁴ F. Flury, F. Zernik, *Schädliche Gase, Dämpfe, Nebel, Rauch- und Staubarten*, Springer, Berlin 1931, p. 405.

⁸⁵ Robert F. Schmidt, *Biommaschine Mensch*, Piper, Munich 1979, p. 124.

⁸⁶ Comparable to what is known among toxicologists as the lethal dose for 100% of the victims, LD₁₀₀. In fact, it would even be more than that, since the LD₁₀₀ value determines the amount necessary to be lethal in general, i.e., regardless of how long it takes for the victim to actually die, whereas in our case the dose required must actually lead to death in just a few minutes, as we will see.

Table 2: Rapidly Fatal Concentrations of Hydrogen cyanide in Air⁸⁹

Source	Concentration	Effect
DuPont, <i>Hydrogen Cyanide</i> ⁹⁰	0.03%/vol.	rapidly fatal
F. Flury, F. Zernik, <i>Schädliche Gase</i> ⁹¹	0.02%/vol.	fatal after 5-10 mins. inhalation
	0.027%/vol.	immediately fatal

screening, which of course is not an option. The only data available here are those that have been collected in the course of executions with HCN that have been performed in the United States. A review of the conditions, based on several publications in the USA about that subject concluded that it takes at least 10 minutes to kill a victim, if it is immediately subjected to the full concentration of around 0.5 %/vol.⁸⁷ In other words, concentrations more than ten times greater than that cited as “*immediately fatal*” in Table 2 are necessary to *safely* kill *all* executees in the United States. From cases of accidental poisoning we also know that even victims who were exposed to great overdoses die only after a surprisingly long period of unconsciousness and subsequent respiratory arrest.⁸⁸

3.2. The Fumigant Zyklon B

Insects and especially their eggs are considerably less sensitive to HCN. For the most part it is necessary to expose them for several hours to rather high concentrations (0.3 to 2%/vol.) before their death is certain. Right until the end of World War Two, *Zyklon B*, a substance produced and licensed by the company DEGESCH of Frankfurt/Main, was of paramount importance in combating insects and rodents in food storerooms, large-capacity transports (trains, ships), public buildings, barracks, prisoner-of-war camps, concentration camps, and of course for hygiene and for disease control in general in many countries around the world.⁹² The *Zyklon B* allegedly used for gassing

⁸⁷ Conrad Grieb, “*Der selbstassistierte Holocaust-Schwindel*”, *VffG* 1(1) (1997), pp. 6-8 (online: vho.org/VffG/1997/1/Grieb1.html; English: “*The Self-assisted Holocaust Hoax*”, codoh.com/gcgv/gcgvself.html).

⁸⁸ M. Daunerer, *op. cit.* (note 89), p. 15.

⁸⁹ Cf. also M. Daunerer, *Klinische Toxikologie*, 30th supplement, 10/87, ecomed, Landsberg 1987, pp. 4ff.

⁹⁰ DuPont, *Hydrogen Cyanide*, Wilmington, Delaware 7/83, pp. 5f.

⁹¹ F. Flury, F. Zernik, *op. cit.* (note 84), pp. 453f.

⁹² For a comprehensive history of *Zyklon B*, including mass gassing claims, but hardly offering more physical data of the product, cf. Jürgen Kalthoff, Martin Werner, *Die Händler des Zyklon B*, VSA-Verlag, Hamburg 1998; aside from Peters *et al.*, *op. cit.* (note 78), and F. Puntigam *et al.*, *op. cit.* (note 33), pp. 35ff.; cf. also O. Hecht, “*Blausäuredurchgasungen zur Schädlingsbekämpfung*”, *Die Naturwissenschaften* 16(2) (1928), pp. 17-23; G. Peters, *Blausäure zur Schädlingsbekämpfung*, Ferdinand Enke Verlag, Stuttgart 1933; G. Peters, W. Ganter, “*Zur Frage der Abtötung des Kornkäfers mit Blausäure*”, *Zeitschrift für angewandte Entomologie* 21(4) (1935), pp. 547-559; F. E. Haag, *Lagerhygiene, Taschenbuch des Truppenarztes*, v. VI, F. Lehmanns Verlag, Munich 1943; W. Dötzer, “*Entkeimung, Entwesung und Entseuchung*”, in J. Mrugowsky (ed.), *Arbeitsanweisungen für Klinik und Laboratorium des Hygiene-Instituts der Waffen-SS*, issue 3, Urban & Schwarzenberg, Berlin 1944; F. Puntigam, “*Die Durchgangslager der Arbeitseinsatzverwaltung als Einrichtungen der Gesundheitsvorsorge*”, *Gesundheitsingenieur* 67(2) (1944), pp. 47-56; O. von Schjerning, *Handbuch der ärztlichen Erfahrungen im Weltkrieg 1914/1918*, v. VII, *Hygiene*, J. A. Barth, Leipzig 1922, esp. pp. 266ff. “*Sanierungsanstalten an der Reichsgrenze*”, R. Wohlrab, “*Flecktyphusbekämpfung im Generalgouvernement*”, *Münchner Medizinische Wochenschrift* 89(22) (1942), pp. 483-488; W. Hagen, “*Krieg, Hunger und Pestilenz in Warsaw 1939-1943*”, *Gesundheitswesen und Desinfektion* 65(8) (1973), pp. 115-127; *ibid.*, 65(9) (1973), pp. 129-143; G. Peters, *Die hochwirksamen Gase und Dämpfe in der Schädlingsbekämpfung*, F. Enke Verlag, Stuttgart 1942; DEGESCH, *Acht Vorträge aus dem Arbeitsgebiet der DEGESCH*, 1942, p. 47; Document NI-9098, Nuremberg Trial, a table of properties of the gaseous insecticides / biocides used by the DEGESCH; H. Kruse, *Leitfaden für die Ausbildung in der Desinfektion und Schädlingsbekämpfung*, 4th ed., Muster-Schmidt, Göttingen 1948; H. Kliewe, *Leitfaden der Entseuchung und Entwesung*, F. Enke Verlag, Stuttgart 1951; more recent discussions of the topic: F. P. Berg, “*Zyklon B and the German Delousing Chambers*”, *JHR* 7(1) (1986), pp. 73-94 (online: codoh.com/gcgv/gcgvtyph.html); F. P. Berg, “*Typhus and the Jews*”, *JHR* 8(4) (1988), pp.

human beings consisted of lumps of gypsum mixed with starch $\frac{1}{4}$ " to $\frac{1}{2}$ " in diameter and soaked with hydrogen cyanide.⁹³ The evaporation of the poison gas from its carrier proceeds rather slowly. The characteristics of HCN evaporating from the carrier substance were documented in 1942 by an employee of DEGESCH.⁹⁴ On dry air of 15°C (59°F), HCN evaporated from the carrier as indicated in Graph 1, *i.e.*, it took 1.5 to 2 hours until 90% of the HCN had been released.

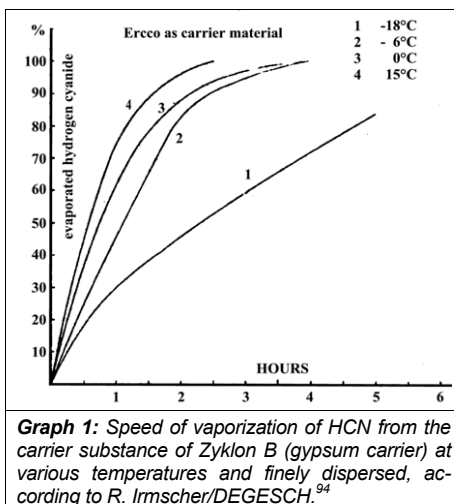
At lower temperatures this process slows down at a rate proportional to the decreasing vapor pressure of the HCN. It is worth noting that according to Irmischer the evaporation rate decreases remarkably if the surrounding air has a high relative humidity, as it must be expected in unheated underground rooms, filled with many human beings. The reason for this is that the Zyklon B carrier cools down while HCN evaporates. Subsequently water from the surrounding damp air condenses on the carrier. Since HCN is extremely soluble in water, a wet carrier would release the remaining HCN only very slowly.

For future reference, we shall point out the probability that at a temperature of 15°C (59°F), in a highly humid environment, a maximum of not more than 10% of the HCN will be released by the carrier substance during the first five, probably even ten minutes.

3.3. Hydrogen Cyanide Residue

3.3.1. Formation

If the hydrogen cyanide from the Zyklon B had bonded with the brickwork only through the process of adsorption, then due to the volatility of hydrogen cyanide (boiling point: 25.7°C/78.3°F) it would no longer be possible today to detect any hydrogen cyanide residues in the remaining walls. But even a brief glance into the clothing disinfection chambers of Buildings 5a and 5b of Birkenau (see cover illustrations) immediately shows a chemist that what he is in fact dealing with is a very



Graph 1: Speed of vaporization of HCN from the carrier substance of Zyklon B (gypsum carrier) at various temperatures and finely dispersed, according to R. Irmischer/DEGESCH.⁹⁴

433-481 (online: who.org/GB/Journals/JHR/8/4/Berg433-481.html); R. Clarence Lang, "Zur Frage der Fleckfieber-epidemien im Zweiten Weltkrieg", *DGG* 36 (2,3) (1988), pp. 7-10, 8-13.

⁹³ Apart from Jürgen Kalthoff, Martin Werner, *op. cit.* (note 92), see the illustrations in J.-C. Pressac, *op. cit.* (note 9), p. 17, and F. A. Leuchter, *op. cit.* (note 1), p. 148, each taken from product information issued by DEGESCH (Deutsche Gesellschaft für Schädlingsbekämpfung), as well as A. Moog, W. Kapp, letter from Detia Freyberg GmbH to the author (Laudenbach, Sept. 11, 1991.); for a more recent article about the history and some physical properties of Zyklon B cf. W. Lambrecht, "Zyklon B – eine Ergänzung", *VffG* 1(1) (1997), pp. 2-5 (online: who.org/VffG/1997/1/Lambrecht1.html).

⁹⁴ R. Irmischer, *Zeitschrift für hygienische Zoologie und Schädlingsbekämpfung*, 34 (1942), p. 36, cf. W. Lambrecht, *op. cit.* (note 93). These data were confirmed by a study conducted by a Soviet commission immediately after the war: *Gosudarstvennyj Archiv Rossiskoj Federatsii*, Moscow, RF, 7021-107-9, pp. 229-243. Two cans of Zyklon B were opened and their content was exposed for two hours to 23-28°C. After this 94% respectively 90% of the original HCN content was evaporated. I owe this information to C. Mattogno; cf. Mattogno, "Die Gaskammern von Majdanek", *VffG* 2(2) (1998), pp. 118, footnote 5 (online: who.org/VffG/1998/2/Mattogno2.html).

common substance: iron blue,⁹⁵ an extremely stable compound formed by the interaction of hydrogen cyanide with iron (ferrous cyanide⁹⁶).

Iron is an element almost ubiquitous in nature, occurring most commonly as ferric oxide (‘rust’). The sand used for concrete and mortar, for example, contains up to 4% iron, while Portland cement contains between 2 to 5% iron.⁹⁷ In general, the iron – in the form of rust – is the reason why building and similar materials (concrete, mortar, plaster, but loam and clay as well) are frequently ochre or red.

So how does the iron blue pigment form? First the hydrogen cyanide must accumulate in the brickwork. A cool and therefore damp wall is conducive to this process, since hydrogen cyanide is most readily soluble in water. Accordingly, cool (10°C/50°F) basement walls with a moisture content some ten times greater⁹⁷ than that of warm, dry rooms (20°C/68°F) also have an approximately ten times greater tendency to become enriched with hydrogen cyanide.⁹⁸ A damp environment (*i.e.*, wall) is also of prime importance for the further steps involved in the chemical conversion into iron blue. Additionally, an alkaline environment is more suitable to accumulate HCN than an acid one, since under alkaline conditions HCN is rapidly converted into simple (non-complex and not very stable) cyanide salts.⁹⁹ The conversion from HCN to cyanide salts is a necessary step for the formation of stable iron-cyanide-complexes, since only the cyanide ion in the salts (CN⁻) is able to react with iron, which includes both a simple linking process (formation of complex salts) and a partial reduction of the oxidation state of Iron from III (as normally found in nature) to II, which is supported by an alkaline medium.¹⁰⁰ In fact, regarding the formation of iron blue apart from humidity and alkalinity all other factors are secondary.¹⁰¹ The exact influence of each factor is still unknown, though. The German expert literature has occasionally reported a case of developing iron blue after a single Zyklon B fumigation in a building of high dampness and alkaline plasters which caused severe damages, since the only way to get rid of this pigment was to knock off the entire plaster-work.¹⁰² From this case it must be concluded that already a single gassing can suffice if the walls of

⁹⁵ Iron blue pigment is the international standard name (ISO 2495) for ferrous cyanide blue pigments of various compositions which are also known as Berlin Blue, Turnbull’s Blue, Prussian Blue, Vossen Blue®, Milori Blue, Parisian Blue, French Blue, China Blue, Bronze Blue, Steel Blue, Ink Blue, etc.

⁹⁶ Cyanides (CN⁻-compounds) are hydrogen cyanide (hydrogen cyanide, HCN) salts. In this case, specifically ferro(III)-ferri(II)-cyanide, but one can expect to find all sorts of iron cyanide compounds in mortar of facilities exposed to HCN.

⁹⁷ Cf., *e.g.*, K. Wesche, *Baustoffe für tragende Bauteile*, 2 vols., Bauverlag, Wiesbaden 1977, esp. v. 1, p. 37, v. 2, pp. 51f.

⁹⁸ L. Schwarz, W. Deckert, *Zeitschrift für Hygiene und Infektionskrankheiten* 107 (1927), pp. 798-813; *ibid.*, 109 (1929), pp. 201-212.

⁹⁹ In fact, the strongly alkaline character of freshly plastered walls would have increased the formation process enormously. The influence of the pH-value of the walls is being ignored by Richard J. Green in his later added online-article “*More on Prussian Blue*” on www.holocaust-history.org/.

¹⁰⁰ This point causes some irritation even among chemists since it is obviously not known that cyanide itself is a reducing agent, and, on the other hand, Fe(CN)₆³⁻ is a strong oxidizing agent especially in alkaline medium, cf. M.A. Alich, D.T. Haworth, M.F. Johnson, *J. Inorg. Nucl. Chem.* 29 (1967), pp. 1637-1642; J.C. Bailar, *Comprehensive Inorganic Chemistry*, vol. 3, Pergamon Press, Oxford 1973, p. 1047; R.M. Izatt, G.D. Watt, C.H. Bartholomew, J.J. Christensen, *Inorg. Chem.* 9 (1970) p. 2019ff.; J.F. de Wet, R. Rolle, *Z. Anorg. Allgem. Chem.*, 336 (1965), p. 96; H. M. Powell, *Proc. Chem. Soc.*, (1959), p. 73. I owe the latter two sources to R.J. Green, *The Chemistry...*, *op. cit.* (note 26).

¹⁰¹ We shall spare the reader a discussion of the minor effects of other properties of the brick on cyanide accumulation and the speed of chemical conversion, and refer instead to Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 151-189.

¹⁰² G. Zimmermann (ed.), *Bauschäden Sammlung*, Band 4, Forum-Verlag, Stuttgart 1981, pp. 120f. (translation in Appendix 1 at the end of this volume); E. Emmerling, in M. Petzet (ed.), *Holzschädlingsbekämpfung durch Begasung*, Arbeitshefte des Bayerischen Landesamtes für Denkmalpflege, Bd. 75, Lipp-Verlag, Munich 1995, p. 43-56, mentions another case, but it is not clear if it is just referring to the same case.

the premise are wet, porous and alkaline. But the formation of iron blue compounds in a room of a building in concentration camp Majdanek, which was converted to a Zyklon B delousing chamber after having been used for other purposes for quite a while, shows, that even old, non-alkaline plaster is able to form huge amounts of iron blue.¹⁰³

3.3.2. Stability

The relevant literature consistently describes iron blue as an extremely stable pigment. It is insoluble in water,¹⁰⁴ resistant to acid rain¹⁰⁵ and also surprisingly resistant to sunlight.¹⁰⁶ When exposed to weathering, other compounds of hydrogen cyanide will even convert preferentially into iron blue.

Three examples will demonstrate the environmentally resistant nature of iron blue. First, the outside walls of the Birkenau delousing building, which are stained blue by iron blue, have lost none of their color despite 50 years of exposure to the adverse environmental conditions of the industrial region of Upper Silesia (see cover illustrations). One might now object that the soluble compounds of hydrogen cyanide in the interior of the walls gradually migrate to the surface, thereby making up for any loss caused by surface erosion and thus only ‘simulating’ long-term stability. However, a long-term test begun in the 1950s to ascertain the environmental resistance of paints has clarified this matter. In this test, many pigments including iron blue and iron oxide (*i.e.*, rust) were tested by applying them only superficially and without protective coating onto a piece of aluminum. After more than 20 years’ exposure to the air of a western industrial suburb of London, two pigments exhibited the least (barely noticeable) changes: iron blue and iron oxide.¹⁰⁷ Even scattered on the ground, iron blue remains stable and fixed for decades, as tests in gas works shut down decades ago have shown. In this case the iron blue obtained in the city’s gas works was used as a herbicide, and is still present today in virtually undiminished quantities.¹⁰⁸ Therefore, if iron blue has formed on and *in* a wall, one may expect to find a long-term stability similar to that of the iron oxide from which it formed.

Thus, once noticeable quantities of hydrogen cyanide salts have accumulated in brickwork, and once damp conditions have allowed these to convert into iron blue, then no appreciable reduction in hydrogen cyanide content is to be expected after 50 years.

A typical example of the way the media deal with these facts is the report that was issued by the German press agency *dpa* and carried on March 29, 1993, in almost all major German daily newspapers and even in some radio news broadcasts, in which it was claimed that, according to unnamed expert, the hydrogen cyanide salts at issue here have a life of only a few months.¹⁰⁹ Inquiries at the Stuttgart *dpa* office responsible for this press release revealed that the editor in charge, Albert

¹⁰³ Cf. J. Graf, C. Mattogno, *op. cit.* (note 30), pp. 149–152. See C. Mattogno’s contribution about the concentrations camp Majdanek in this volume.

¹⁰⁴ The literature frequently gives only the rather unsatisfactory term ‘insoluble’. For more details see the *The Rudolf Report*, *op. cit.* (note 27), pp. 171–175.

¹⁰⁵ Iron blue is considered an acid-resistant pigment; cf., e.g., B. J. A. Sistino, in T. C. Patton (ed.), *Pigment Handbook*, v. 1, Wiley, New York 1973, pp. 401–407; no appreciable decomposition occurs until the pH drops below 1. The pH of iron blue suspensions, for ex., is around 4–5; H. Ferch, H. Schäfer, *Schriftenreihe Pigmente*, 77, Degussa AG, Frankfurt 1990.

¹⁰⁶ *Ullmanns Encyklopädie der technischen Chemie*, v. 13, Urban & Schwarzenberg, Munich 1962, p. 794; *ibid.*, v. 18, Verlag Chemie, Weinheim 1979, pp. 623ff.; L. Müller-Focken, *Farbe und Lack* 84 (1987), pp. 489–492.

¹⁰⁷ J. M. Kape, E. C. Mills, *Transactions of the Institute of Metal Finishing* 35 (1958), pp. 353–384; *ibid.*, 59 (1981), pp. 35–39.

¹⁰⁸ D. Maier, K. Czurda, G. Gudehus, *Das Gas- und Wasserfach, Gas · Erdgas* 130 (1989), pp. 474–484.

¹⁰⁹ Cf. *Süddeutsche Zeitung*, *Die Welt*, *Stuttgarter Zeitung*, and *Südwest Presse*, all of March 29, 1994. This fabricated press release was since quoted frequently by several German officials, especially in German Landes- and Bundesverfassungsschutzberichten (Report of State and Federal Agencies for the Protection of the Constitution).

Meinecke, had invented this 'expert opinion' out of thin air. Evidently even the *dpa* press agency does not shy back from issuing false reports.¹¹⁰

4. Fumigation

4.1. Disinfestation of Material Objects⁹²

Initially, ordinary rooms were turned into disinfestation facilities for material objects by means of makeshift alterations intended to render the windows and doors as gas-proof as possible and to provide adequate heating and ventilation systems for the rooms. Workers wearing protective masks distributed the Zyklon B evenly on the floor of the room, which had been previously stocked with the items to be fumigated. This procedure was similar to that used at the time for the fumigation of ordinary rooms for purposes of disinfestation.

Later, special facilities were constructed, and outfitted with heating, ventilation and air turnover (circulation system) facilities. These facilities had a relatively small volume to avoid any dead space, *i.e.*, to conserve the rather costly insecticide.

Depending on the facilities and on the kind of vermin to be exterminated, the concentrations of hydrogen cyanide varied from 0.5 to 2%/vol., while the duration of use ranged from less than 2 hours to 10 hours and more.

The delousing chambers of Buildings 5a and 5b in Birkenau had been constructed especially for delousing purposes (with ventilation facilities, heating, aeration chimneys), but their size made them very expensive to operate. They had an area of approximately 130 m² and a volume of at least 400 m³. Using the entire room as delousing chamber would require quantities of Zyklon B containing at least 4 to 5 kg (10g/m³) hydrogen cyanide.¹¹¹ Assuming one fumigation cycle per day, these facilities alone used up 3.6 tons of Zyklon B a year, which corresponds to almost 50% of the entire quantity of Zyklon B delivered to Auschwitz in 1942, where the total amount delivered was 7.5 tons.¹¹²

If one considers that Birkenau also had other hydrogen cyanide delousing facilities of various size¹¹³ and that inmates' barracks were also fumigated with this insecticide on occasion,¹¹⁴ then it becomes apparent that the quantities of Zyklon B supplied to Auschwitz can be explained by the normal disinfestation operations, which is in fact generally accepted. Pressac, for example, suggests that 95 to 98% of all the Zyklon B supplied to the camp was used for its original purpose, namely to delouse clothing and facilities,¹¹⁵ and he cites findings of the Nuremberg Tribunal in support of this.¹¹⁶ And in fact, relative to the numbers of people in the Auschwitz camp, the quantities of Zyklon B supplied to this camp did not exceed the quantities supplied to other concentration camps where it is known that no exterminations took place. Clearly, the annual quantity supplied to

¹¹⁰ Cf. W. Schlesiger, *Der Fall Rudolf*, Cromwell, 20 Madeira Place, Brighton/Sussex BN2 1TN, England, 1994, pp. 21-24 (online: vho.org/D/df/Fall.html); G. Rudolf, *DGG* 42(2) (1994), pp. 25f. (online: vho.org/D/DGG/Rudolf42_2.html).

¹¹¹ The mass declarations on Zyklon B tins always referred to the net HCN content, which was about 30-40% of the entire mass of the content, *i.e.*, 60-70% of the mass were due to the carrier.

¹¹² Office of Chief of Counsel for War Crimes, affidavit of A. Zaun, Hamburg, Oct. 24, 1945, Document No. NI-11,396, quoted according to U. Walendy, *Auschwitz im IG-Farben-Prozeß*, Verlag für Volkstum und Zeitgeschichtsforschung, Vlotho 1981, p. 62.

¹¹³ According to J.-C. Pressac, *op. cit.* (note 9), p. 550, there were a total of 25 chambers in the camp in which material objects were deloused with Zyklon B, but no doubt not already in 1942.

¹¹⁴ The documentary and witness accounts of such fumigations are numerous, *e.g.*, the order issued on Aug. 12, 1942, by Camp Commandant Höß regarding accidents during the fumigation of barracks; J.-C. Pressac, *ibid.*, p. 201.

¹¹⁵ *Ibid.*, pp. 15, 188.

¹¹⁶ Office of Chief of Counsel for War Crimes, British Military Court, trial of B. Tesch et al., Hamburg, March 1-8, 1946, Document No. NI-12,207, quoted according to U. Walendy, *op. cit.* (note 112), p. 83.

Auschwitz was not even enough, since the spotted fever epidemics could never be entirely prevented. These considerations show that the disinfestation chambers of Buildings 5a and 5b could not have been used more than once a day.

4.2. The Gassing of Human Beings

4.2.1. Eyewitness Testimony

Where the trustworthiness and credibility of eyewitness testimony are concerned, Pressac himself judges them at times quite harshly.¹¹⁷ He attempts to explain the untruths, impossibilities and exaggerations, and in many cases he corrects them. For example, Pressac estimates the numbers of victims per gassing as considerably less than do the eyewitnesses, who frequently tell of several thousand victims per cycle.¹¹⁸ Since the number of victims in Auschwitz has been officially reduced from 4 million to approximately 1 million¹¹⁹ since spring 1990, Pressac, drawing primarily on a work by D. Czech,¹²⁰ has manipulated the claims of the witnesses to reflect these new figures. The following describes the procedures of the alleged homicidal gasings for the individual facilities, as Pressac believes he can reconstruct them following his correction of the eyewitness testimony [my comments in brackets]:

Crematorium I:

500 to 700 victims undress out of doors; the 'gas chamber' (mortuary) is entered via the furnace room [passing heaps of corpses from the last batch which are awaiting their cremation. This scenario appears to be unbelievable, since it requires that the victims passing these heaps would have stayed calm.]; Zyklon B is introduced through [non existent] input shafts; after the victims have died (some 5 minutes later [which is impossible]) the ventilators are turned on; after 15 to 20 minutes of ventilation, the door to the furnace room is opened, the chamber is cleared – sometimes without the use of gas masks on the part of the workers [which would have been very dangerous, if not fatal] – and the victims are cremated.¹²¹ According to Pressac only a few gasings took place here, with a total of less than 10,000 victims.¹²²

Crematoria II & III:

800 to 1,200 victims undress in mortuary 2; they enter mortuary 1 (the 'gas chamber'); Zyklon B is introduced via [non existent] input shafts; after the victims have died (5 minutes [which is impossible]) the ventilators are turned on; after approximately 20 minutes the doors are opened; the bodies, covered with blood, vomit and feces, are hosed off; the bodies are removed, usually without the use of gas masks on the part of the workers [which again would have been very dangerous, if not fatal]; cremation takes place on the ground floor.¹²³ According to Pressac the total number of victims

¹¹⁷ J.-C. Pressac, *op. cit.* (note 9), pp. 124f., 162, 174, 177, 181, 229, 239, 379f., 459-502; more succinctly in J.-C. Pressac, *op. cit.* (note 21); cf. the critiques by H. Verbeke, *op. cit.* (note 22) and A.N.E.C., *op. cit.* (note 22).

¹¹⁸ 2,000 according to C. S. Bendel, 3,000 according to M. Nyiszli, cf. J.-C. Pressac, *op. cit.* (note 9), pp. 469ff.

¹¹⁹ Cf., e.g., *Jüdische Allgemeine Wochenzeitung*, July 26, 1990; *Hamburger Abendblatt*, July 25, 1990; *Hannoversche Allgemeine Zeitung*, July 18, 1990; *Der Spiegel* 30/91, p. 111; *Süddeutsche Zeitung*, Sept. 21, 1990; *Die Tageszeitung*, July 18 and 19, 1990; *Vorarlberger Nachrichten*, Aug. 22 and 29, 1990.

¹²⁰ D. Czech, *Auschwitz Chronicle, 1939-1945*, Henry Holt, New York 1989.

¹²¹ J.-C. Pressac, *op. cit.* (note 9), p. 125.

¹²² *Ibid.*, pp. 131f.; J.-C. Pressac, *op. cit.* (note 18), pp. 34f.

¹²³ J.-C. Pressac, *op. cit.* (note 9), p. 253.

for crematorium II was some 400,000 (one gassing per day on average), 350,000 for crematorium III.¹²⁴

Crematoria IV & V:

Several hundred victims undress out of doors when the weather permitted, otherwise in the mortuary; victims walk to the 'gas chamber' [passing heaps of corpses from the last batch which are awaiting their cremation...]. Zyklon B is thrown in through input hatches, from a ladder; after 15 to 20 minutes the doors are opened; bodies are removed to the mortuary or outside to the burning pits behind crematorium V, while the workers sometimes do and sometimes do not wear gas masks [which would be fatal, since no ventilation system reduces the HCN concentration]. According to Pressac, the number of victims is difficult to estimate, presumably approximately 100,000 each.¹²⁵ The same goes for Bunkers I and II.

Pressac repeatedly mentions concentrations of 12g hydrogen cyanide per m³, or 1% by volume. To support this claim he cites many eyewitness accounts which allege that four to six 1-kg-tins¹¹ of Zyklon B were emptied into the 'gas chambers' (mortuaries) of crematoria II and III, which indeed corresponds to a concentration of 1% by volume.¹²⁶

Another indirect and surely the most conclusive source to determine the quantities of hydrogen cyanide used are the gassing times attested to by the witnesses. These times are consistently a matter of minutes,¹²⁷ and it is no doubt justified to wonder how the witnesses could possibly know this, since according to the conventional accounts the 'gas chamber' doors had at most one peephole, which SS physicians allegedly availed themselves of to supervise the proceedings.¹²⁸ Such witnesses would thus be the only ones not reporting from hearsay. In his 1992 report Professor G.

¹²⁴ *Ibid.*, p. 183. Since in his latest work he assumes some 500,000 victims of the gas chambers (*op. cit.*, note 21, German ed. p. 202), the corresponding figures for the individual facilities ought to be reduced further, and following F. Meyer, "Die Zahl der Opfer von Auschwitz", *Osteuropa*, 52(5) (2002), pp. 631-641, even more.

¹²⁵ J.-C. Pressac, *op. cit.* (note 9), pp. 384-390.

¹²⁶ *Ibid.*, pp. 16, 18, 253; J.-C. Pressac, *op. cit.* (note 21), p. 71; cf. also J. Buszko (ed.), *Auschwitz, Nazi Extermination Camp*, Interpress Pub., Warsaw 1985, p. 118, who mentions 6 to 12 kg.

¹²⁷ Regarding witness statements on this point cf. Schwurgericht Hagen, verdict from Jul. 24, 1970, Ref. 11 Ks 1/70, p. 97 (5 mins.); Final Trial Brief of the Prosecution, acc. To U. Walendy, *op. cit.* (note 112), pp. 47-50 (3 up to maximally 15 mins.); E. Kogon, H. Langbein, A. Rückerl *et al.* (ed.), *Nationalsozialistische Massentötungen durch Giftgas*, S. Fischer Verlag, Frankfurt 1983, passim. (immediately to 10 mins., more rarely to 20 mins.); J. Buszko (ed.), *Auschwitz, Nazi Extermination Camp*, Interpress Publishers, Warsaw, 2nd ed. 1985, in cooperation with State Museum of Auschwitz, pp. 114 + 118 (a few mins.); H.G. Adler, H. Langbein, E. Lingens-Reiner (ed.), *Auschwitz*, Europäische Verlagsanstalt, Cologne, 3rd ed. 1984, pp. 66, 80 + 200 (a few to 10 mins.); Hamburger Institut für Sozialforschung (ed.), *Die Auschwitz-Hefte*, v. 1, Beltz Verlag, Weinheim 1987, pp. 261ff. +294 (immediately to 10 mins.); C. Vaillant-Couturier, *Trial of the Major War Criminals (IMT)*, v. VI, p. 216 (5-7 mins.); M. Nyzsli, in G. Schoenberger (ed.), *Wir haben es gesehen*, Fourier, Wiesbaden 1981, p. 250 (5 mins.); C. S. Bendel in H. Langbein, *Menschen in Auschwitz*, Europaverlag, Vienna 1987, p. 221 (victims stopped screaming after 2 mins.); P. Broad in B. Naumann, *op. cit.* (note 40), p. 217 (4 mins.); doors being opened after 10-15 mins.: A. Rückerl, *NS-Verbrechen vor Gericht*, C. F. Müller, Heidelberg 1984, pp. 58f.; K. Hölbing in H. Langbein, *Der Auschwitz-Prozess*, Europäische Verlagsanstalt, Frankfurt/Main 1965, p. 73 (1 min.); R. Böck, *ibid.*, p. 74 (victims screamed for 10 mins. after door was closed, door was then opened); H. Stark, *ibid.*, p. 439 (victims screamed for 10-15 mins.); F. Müller, *ibid.*, p. 463 (8-10 mins.); E. Pyš, *ibid.*, p. 748 (ventilator was turned on after a few mins.); K. Lill, *ibid.*, p. 750 (a few seconds after Zyklon B was thrown in there was a scream, a few minutes later smoke billowed from the chimney); H. Aumeier, *op. cit.* (note 40), 1/2 to 1 min.).

¹²⁸ Regarding this G. Rudolf, "Auschwitz-Kronzeuge Dr. Hans Münch im Gespräch", *VffG*, 3(1) (1997), pp. 139-190 (online: vho.org/VffG/1997/3/RudMue3.html); Münch is claiming that it took 3 minutes in summertime and 5 in wintertime to kill all victims, pp. 154, 162f, 165.

Jagschitz quotes one such ‘qualified’ witness.¹²⁹ The Auschwitz camp physician he quotes – Dr. Horst Fischer, who claims to have frequently supervised ‘gas chamber’ executions himself – reports of gassing times of two to three minutes, which agrees with the claims of the vast majority of all other witnesses, including the SS man Hans Münch in an interview conducted by this author.¹²⁸ The former Camp Commandant R. Höß also spoke of 3 to, in exceptional cases, 15 minutes.¹³⁰ Such a relatively quick execution would require the use of correspondingly large quantities of Zyklon B. The approximate quantity shall be determined in the following.

4.2.2. Criticism of Eyewitness Testimony

We shall not deal with thorough criticism of eyewitness testimonies here, which has been done already elsewhere,¹³¹ but will focus on only two physical problems, and we shall ignore the fact that there were no Zyklon B input hatches in the roofs of the crematoria I-III (which is a bit grotesque, but otherwise one would have to stop any further analysis). In order to assess the degree to which official eyewitness testimony and other accounts of the alleged gassing procedures approximate reality, one must consider the following factors:

1. Is the gassing procedure attested to physically possible, and if so, under what conditions?
2. What time would have been required to ventilate the facilities crowded with bodies? or: were the clean-up operations attested to in the chambers possible?¹³²

4.2.2.1. Poisoning or Suffocation?

If one assumes an execution time roughly commensurate to that in American gas chambers (10 minutes, with approximately 0.3% hydrogen cyanide per m³), then the concentration of 0.3% by volume (3.6 g/m³) must have prevailed in even the hindmost corner of the ‘gas chamber’ by the end of the execution process at the latest, *i.e.*, after 10 minutes. Given a free air volume of 430 m³ in the mortuaries 1 of crematoria II and III,¹³³ this corresponds to approximately 1.5 kg of evenly distributed hydrogen cyanide (3.3 lbs). Since after 5 to 10 minutes the carrier substance has released only 10% of its hydrogen cyanide, then an execution that takes only a few minutes would require the use of 10 times this quantity, *i.e.*, at least 15 kg Zyklon B (33 lbs). Of course this would work only on the condition that the hydrogen cyanide that is released would reach the victims right away, which one cannot expect in large and overcrowded rooms. We note, therefore that for the gassing procedures attested to, at least 20 kg of Zyklon B would have had to be used per gassing (44 lbs). The quantities actually attested to by witnesses – 5 to 12 kg (11 – 26 lbs) – thus correspond at best to the absolute minimum required.

On the basis of detailed calculations, it was demonstrated that the victims could not possibly have breathed the available air volume of the chamber (400 m³) more than once within the 5 to 10 minutes for which the people locked into the ‘gas chamber’ allegedly still lived following the introduc-

¹²⁹ Transcript of the report by Prof. Dr. G. Jagschitz, days 3-5 of the trial of Honsik, April 29, April 30, May 4, 1992, Ref. 20e Vr 14184 and Hv 5720/90, District Court Vienna; regarding the credibility of this testimony, cf. the chapter by W. Rademacher, this volume.

¹³⁰ Document 3868-PS, *IMT v. XXXIII* pp. 277ff., quoted according to L. Rosenthal, “*Endlösung der Judenfrage*”, *Massenmord oder “Gaskammerlüge”*?, Verlag Darmstädter Blätter, Darmstadt 1979; in his later testimony in Krakow he wrote about up to 20, but normally 5 to 10 mins, cf. J. Graf, *op. cit.* (note 48), pp. 61-82, here p. 72.

¹³¹ Aside from the many fundamental studies of other authors in the present volume (cf. esp. note 17 of M. Köhler’s contribution), cf. especially J. Graf, *op. cit.* (note 48).

¹³² The following calculations base on probable assumption and should be considered as extrapolations only, but this suffice to get an idea about some physical prerequisites to make the attested scenarios at least nearly possible.

¹³³ 504 m³ of the morgue minus 1,000 × 0.075 m³ (vol. of victims).

tion of the poison gas.¹³⁴ This shows that the respiration of the victims could not have reduced the poison gas content of the air significantly below 50% of its hypothetical maximum initial concentration. But since the Zyklon B still contains 90% of its original content after the first 5 to 10 minutes following its distribution, *i.e.*, after the death of the victims, the poison gas content of the air will continue to rise. This shows that under the conditions attested to by the witnesses, the victims could have breathed in (i.e. filtered away) only a small fraction of the poison used.

The theory occasionally advanced, that the victims had absorbed all of the poison gas,¹³⁵ would require that only very small quantities of poison gas were used, so that the people could have acted as living filters for the entire duration of evaporation, *i.e.*, the time for which the Zyklon B released the poison (at least 2 hours). This means that the doses of poison were too small to kill them, *i.e.*, the concentrations were below 0.01% by volume – meaning that less than 500 g of Zyklon B was used.

However, it can be shown that the victims in the airtight chamber would probably have suffocated after only one hour and without any poison gas,¹³⁴ so that even under these conditions the victims' complete absorption of the hydrogen cyanide would have failed due to the slow rate of evaporation of hydrogen cyanide from the Zyklon B carrier material. Thus, this theory not only contradicts the eyewitness statements with respect to quantities of Zyklon B and speed of execution, but is also technically utterly nonsensical, since if the victims had been killed by suffocation there would have been no need to expend the costly Zyklon B, which was in short enough supply even without being wasted.

4.2.2.2. Speed of Ventilation of the 'Gas Chambers'

The following shall help explain a somewhat complex mathematical concept. Imagine, if you will, that someone is given a bucket containing 100 blue balls. Each time he reaches into the bucket, he puts in one red ball, briefly mixes the contents and, without looking, takes out one randomly selected ball. How often will he have to do this until only 50 blue balls are left in the bucket and all the others are red? Clue: assuming that he has already replaced half of all the blue balls with red ones, what is the chance that in blindly taking out another ball he will take out a red one instead of a blue one, thus defeating his purpose, *i.e.*, the intended exchange? This is the sort of problem that arises in ventilating a room, when stale and fresh air mix. It means that it takes considerably longer to successfully ventilate a room than is generally assumed. In the case described above, it takes an average of 70 exchanges before half the blue balls have been replaced by red ones.¹³⁶

Calculations have shown that the ventilation facilities in the alleged 'gas chambers' of crematoria II and III in Birkenau – facilities designed only for ventilation of ordinary mortuaries – could have performed at most 6 to 8 air exchanges per hour.¹³⁷ Due to the poor system configuration (inlet right above outlet) and the alleged overcrowding of the room with bodies, half an hour would never have sufficed to achieve harmless levels of hydrogen cyanide following a gassing, even if there had been

¹³⁴ G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 211-216.

¹³⁵ J. Bailer, *op. cit.* (note 15); G. Wellers, *op. cit.* (note 16), as well as H. G. von Schnering, personal communication.

¹³⁶ An accurate mathematical approach is given in G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 220-223.

¹³⁷ According to the documents, mortuaries 1 of crematoria II and III (approx. 480 m³, or 16,950 cu.ft.) had a ventilator for 4,800 m³ (169,500 cu.ft.) of air per hour at 40 cm water-column. According to W. Zwerenz (unpub., Landshut 1991) and identical findings by W. Lüftl (Vienna, 1992), the difference in pressure that was to be overcome was considerably greater than 40 cm water-column. J.-C. Pressac, *op. cit.* (note 21), p. 38, claims that a much more powerful ventilator with a capacity of 8,000 m³/h (282,500 cu.ft./h) had been installed. However, according to C. Matogno, in H. Verbeke, *op. cit.* (note 22), pp. 134, 136, there is no evidence to support this claim, since Pressac's source also cites the old capacity of 4,800 m³/h.

no Zyklon B still releasing gas for hours on end. The eyewitness testimony claiming adequate ventilation after 20 to 30 minutes in mortuaries 1 of crematoria II and III are thus not credible.¹³⁸

This pertains all the more for crematoria IV and V as well as for the sinister Farm Houses (Bunkers) which could have been aired out only via one or two doors. Since they are said to have been equally crammed full of bodies, with the Zyklon B scattered among them, the ventilation time would have been at least one day, the same as was required for ordinary room disinfestations.¹³⁹ What is more, ordinary rooms would allow for the removal of the Zyklon B, and generally have windows to facilitate ventilation and are not packed with bodies. Eyewitness testimony telling of work performed without the benefit of gas masks in these ‘gas chambers’ immediately or shortly after the gassing is thus utterly unbelievable. And even if the workers had worn gas masks – carrying the corpses would have been hard work (causing perspiration! cf. Section 3.1.), and in these rooms high in hydrogen cyanide any such work would have been extremely risky due to the potential for poisoning via the skin.

4.2.3. Evaluation of Eyewitness Testimony

Again we will ignore the problem of the Zyklon B input hatches, which demonstrably were not present in the ceilings of mortuaries 1 of crematoria II and III, and we will pretend that they were in fact there.

Under the given technical conditions, the executions with Zyklon B as recounted by the witnesses would not under any circumstances have been possible as rapidly as some allege (‘a few moments’, ‘immediately’), and ‘within a few minutes’ only if horrendous quantities of Zyklon B had been used – which would have been nonsensical (too costly), dangerous and awkward at once. As well, the walls of the chambers would have been exposed to high concentrations of hydrogen cyanide for long periods of time. Mass executions with HCN in huge rooms would have required the application of gaseous HCN, blown in and evenly distributed by fans, or pure liquid HCN, evaporated and distributed by a mixed heating and ventilation device.¹⁴⁰

The alleged entering of the ‘gas chambers’ without safety measures, the hard work performed in them – sometimes done bare-chested and while eating and smoking – and the simultaneous claim that great quantities of poison gas were used, combine to prove these witnesses guilty of making false statements.

No less false are the times alleged for the ventilation of mortuaries 1 (the ‘gas chambers’) of crematoria II and III, since the witnesses proceeded on the mistaken assumption that a single air exchange would remove all the poison gas. The delay in the reduction of the remaining concentration of hydrogen cyanide means that in a realistic scenario the required ventilation time would exceed that recounted by the witnesses by a factor of 10 or more (diminished circulation due to the bodies, ‘short-circuit’ of air, aftergeneration of gas from the Zyklon B). As well, the problem of continued aftergeneration of gas from the remaining Zyklon B, which would have made it impossible to work within the chambers without protective clothing in anything less than 2 hours even with ongoing ventilation, also prove that the witnesses have not told the truth.

¹³⁸ A detailed discussion and calculations about the ventilation of this morgue can be found at *op. cit.* (note 29).

¹³⁹ *Entseuchungs- und Entwesungsvorschrift für die Wehrmacht*, H. Dv. 194, M. Dv. 277, L. Dv. 416, Reichsdruckerei, Berlin 1939; *Richtlinien für die Anwendung von Blausäure (Zyklon) zur Ungeziefervertilgung (Entwesung)*, Gesundheitsanstalt des Protektorats Böhmen und Mähren, Prague n.d.; Doc. NI-9912 (1) in the Nuremberg Trial; *Technische Regeln für Gefahrstoffe*, TRGS 512, Begasungen, BArbBl. No. 10/1989, 72, in R. Kühn, K. Birett, *Merkmale Gefährlicher Arbeitsstoffe*, ecomed, Landsberg 1990.

¹⁴⁰ This is also the opinion of the French chemical expert on hydrogen cyanide, B. Clair, *op. cit.*, (note 25), who otherwise strongly disagrees with my conclusions; *i.e.*, he believes in the NS ‘gas chambers’.

The 'gas chambers' of crematoria IV and V as well as of Bunkers I and II would have had to be designed and built as instruments of mass murder if the mass gassings alleged to have been planned and in progress during the construction of these facilities had really taken place; yet even Pressac admits that the gassing procedures attested to were illogical and ridiculous, and highly dangerous to the *Sonderkommandos* in particular. In the face of all this, anyone approaching this issue from a scientific and technical perspective cannot but conclude that the alleged murderers went to great lengths to devise the most expensive, complicated, dangerous and problematic way to kill people *en masse*. For example, the coal-refining BUNA works of I.G. Farbenwerke AG, only a few miles away, could easily have provided a cheap supply of coal gas high in carbon monoxide for poisoning, or bottled nitrogen for asphyxiation.¹⁴¹ But in Auschwitz, of all places, it had to be the expensive, scarce and awkward-to-use Zyklon B that was used, even though it was badly needed everywhere else for pest control. Yet in other alleged extermination camps far distant from the BUNA plant, carbon monoxide is said to have been used to kill people, and to have been generated for this purpose with Diesel engines from captured Russian tanks, whose exhaust fumes, however, contain only non-lethal quantities of carbon monoxide when operated in neutral gear (as they would have to have been).¹⁴²

One must realize that near the alleged homicidal 'gas chambers' in Auschwitz there were highly efficient delousing facilities, with airlocks, heating, powerful ventilators etc., and all of them had been constructed prior to the alleged homicidal 'gas chambers'. Further, at the time of construction of these alleged 'gas chambers' the technology for fumigating material objects had advanced greatly and the production of such facilities was in full swing. From everyday practical experience in delousing, the difference in time and material (Zyklon B) requirements between fumigations with and without air circulation will have been well-known. One might therefore expect the application of at least similar technological standards for the alleged homicidal gassing facilities, but clearly nothing even remotely approaching such standards was in fact used.

For propagandistic reasons it would have been obvious to present such facilities as the delousing chambers of Buildings 5a and 5b as homicidal 'gas chambers'. But no attempts were ever made to do so, and there are also no eyewitness statements alleging such a use of these rooms. Further, the doors of the delousing room of Building 5b – both as shown on the construction plans and as they actually exist there today – open inward, which means that in any mass gassing the bodies lying by the doors would have kept these from being opened afterwards. These rooms, therefore, were certainly never used as execution 'gas chambers'.

We will just comment briefly on the widely held belief that the poison gas entered the alleged execution 'gas chambers' via showerheads. In Zyklon B the active substance hydrogen cyanide is adsorbed on the solid carrier substance, mainly gypsum, and is released only gradually. Since the poison is neither a liquid nor a gas under pressure, the hydrogen cyanide from this product could never have been channeled through narrow water pipes and showerheads. Any showers, real or fake, could thus only have served to deceive the victims, but never to introduce the poison gas. Even with all the arguing and dissension that characterizes the overall subject, there is a general consensus on this particular point.

¹⁴¹ A more detailed discussions of the odds and evens of different poisonous gases which could have served for mass murder can be found in G Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 241-244.

¹⁴² Cf. the chapter by F. P. Berg, this volume.

5. Valuation of Chemical Analyses

5.1. The Samples

Before taking sample material from the alleged Auschwitz ‘gas chambers’ one ought to verify that the material is in fact original, and to investigate its post-war history. The foundations and foundation walls of crematoria IV and V visible today were constructed after the war by the Museum Administration.¹⁴³ Since the origin of the material used is uncertain, it hardly makes sense to take samples here.¹⁴⁴ By incredibly good luck, however, the ‘gas chamber’ (mortuary 1) of crematorium II has largely survived intact. Aside from the two holes in the ceiling discussed in 2.4.1. (*illustration* 6, 7), the building materials are not only indisputably original and unaltered, but are also largely protected from weathering by the ceiling. Furthermore, according to Pressac, this room was allegedly the central site, so to speak, of alleged mass murder. This is where most of the gassings are said to have occurred. Taking samples here is thus appropriate not only by virtue of the original nature and history of the material, but also due to the results which an analysis may be expected to return. If iron blue residue is to be expected in homicidal ‘gas chambers’, then here is where one should strike pay dirt. To date there have been three samplings worth mentioning:¹⁴⁵ by Leuchter,¹ Rudolf¹⁹ and Ball.¹⁴⁴ The reader is referred to these sources for details on sample removal and characterization.

5.2. Results of the Analyses

Table 3 summarizes the most important results of the analyses of material samples for cyanide content (cyanides = hydrogen cyanide compounds). The first part of the Table reflects samples taken from alleged ‘gas chambers’. The second section pertains to samples from delousing chambers. The third shows the results of analyses of samples relating neither to ‘gas chambers’ nor to delousing chambers. This would actually also be the proper category for all samples taken from the reconstructed foundations and foundation walls of crematoria IV and V as well as from the Farm Houses (‘Bunkers’), whose building materials are of unknown origin. On the basis of control samples it can be shown that due to the nature of the sample material, concentrations of less than 10 mg/kg are unreliable and hence must be considered null (see control analyses to samples R 3 & 8).¹⁴⁶ One can thus observe that the alleged ‘gas chambers’ exhibit the same concentrations of hydrogen cyanide residue as any building selected at random – namely, none that are great enough to be reliably interpreted. The unreliability of low cyanide residues is additionally proven by a sample from a collapsed Bavarian farmhouse, my sample no. 25, which has the highest cyanide level of all samples of this group (9.6 mg/kg, reproducible probably due to low CaCO₃ amount in bricks), and by Leuchter’s sample no. 28 from crematorium I, which he erroneously took from a wall which un-

¹⁴³ Aside from the statements of J. Markiewicz et al., *op. cit.* (note 11), cf. also J.-C. Pressac, *op. cit.* (note 9), p. 390.

¹⁴⁴ The fact that F.A. Leuchter, *op. cit.* (note 1), as well as J. Ball, *The Ball Report*, Ball Resource Services Ltd., Delta, BC, Canada, 1993, found traces of cyanide in samples taken from there may indicate either the application of HCN on these materials of unknown origin by fumigation or homicidal gassings or that results near the lower detection limit are hardly reproducible and insofar hard to interpret.

¹⁴⁵ We are deliberately ignoring the results of the Krakow Report, *op. cit.* (note 11), since improper analytical methodology renders them useless; cf. *The Rudolf Report*, *op. cit.* (note 27), pp. 250-252, 270-273, and chapter 5.4. in this contribution.

¹⁴⁶ The reason for this may be that high amounts of CaCO₃ may disturb the analysis as described in the according norm (DIN 38 405/D13f.), cf. G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 252-258. The reason for the unexpected broad variation of samples with high cyanide residues (my sample no. 11) may be due to the different method of analysis necessary for high cyanide amounts: it can no longer be detected photometrically but must be measured gravimetrically, a method rarely used for cyanides in modern laboratories, which is therefore more liable for errors.

til 1944 belonged to the wash room, that is, it was *not* part of the alleged 'gas chamber' (1.3 mg/kg). In contrast, the residual quantities in the delousing barracks range from 1,000 to 10,000 mg/kg, meaning that 0.1 to 1% of the plasterwork (not the entire wall!) in fact consists of cyanides. These findings are not only not questioned by the Director of the Auschwitz Museum, but are in fact expressly confirmed.¹⁴⁶ Since the results are no longer subject to doubt, we would urge that no further samples be removed without official sanction, lest these facilities suffer the same fate as did the Berlin Wall.

5.3. Interpreting the Results

5.3.1. Rudolf's Interpretation

In view of these perfectly clear results and of the fact that they cannot be explained away by any disintegration processes of iron blue, which remains stable for great periods of time, the question which needs to be addressed is how these results are to be interpreted scientifically.

First of all one has to be careful when comparing the analyses results of samples taken from the delousing chambers with those taken from the alleged homicidal gas chamber. The reason for this is that especially in case of the delousing facilities several factors are unknown which can affect the interpretation of the results:

1. In case of the delousing chambers BW 5a and 5b it is not known how much time passed between the time when their walls were plastered and when they started being used for their purpose.
2. We therefore cannot exactly determine a) the exact humidity, and b) the alkalinity of the walls, when started being used.
 - a) Single layer brick walls, as used in case of the delousing facilities BW 5a and 5b, normally are quite cold and thus wet in winter time. So, if these facilities went into operation in autumn or winter time immediately after having been plastered, their walls certainly would have absorbed enormous amounts of HCN and probably converted it into long-term stable iron cyanide compounds already during the very first gassing (comparable with the quoted construction damage case¹⁰²). Fortunately, we can compare the results of samples taken from an internal wall (no. 12 & 13) with those of external walls (9,11,20,22) of the delousing facility BW 5a, which clearly shows that even dry and warm walls do form high amounts of iron blue residues.
 - b) Furthermore, having enormous problems with a raging spotted fever epidemic, the SS certainly did not wait for fighting the lice until the plaster of the recently finished delousing gas chambers was pH-neutral.

On the other hand, the features of the walls of the mortuary 1 of crematorium II can more easily be determined:

1. We do know, that due to its chemical composition the cement mortar used for plastering the underground morgues remain highly alkaline for many months.
2. We do know that this cement mortar has generally a considerable higher tendency to absorb gaseous and liquid compounds than lime mortar as used in delousing facilities.¹⁴⁷
3. We do know, that walls in unheated underground rooms have relatively cold walls of high humidity, which increases absorption of HCN enormously (an estimated average wall temperature of 10°C and a relative humidity of the air at around 100% is reasonable, increasing the absorption by around a factor 10 compared to a wall at 20°C and 45% relative humidity).¹⁴⁸

¹⁴⁷ That is due to its higher inner surface, *i.e.*, like a fine sponge (here cement mortar) can absorb more water than a coarse one (here lime mortar). W. Czernin, *Zementchemie für Bauingenieure*, Bauverlag, Wiesbaden 1977, p. 49f. (Engl.: *Cement chemistry and physics for civil engineers*, *ibid.*, 1980); cf. my report (note 19), chapter 2.5.

¹⁴⁸ K. Wesche, *op. cit.* (note 97) vol. 1, p. 37

Table 3: Cyanide Concentrations in the Walls of 'Gas Chambers' and Delousing Chambers of Auschwitz & Birkenau			
No.	Location	Sampler	c[CN] mg/kg
1-7	Crematorium II, mortuary 1 ('gas chamber')	Leuchter	0.0
8	Crematorium III, mortuary 1 ('gas chamber')	Leuchter	1.9
9	Crematorium III, mortuary 1 ('gas chamber')	Leuchter	6.7
10,11	Crematorium III, mortuary 1 ('gas chamber')	Leuchter	0.0
13,14	Crematorium IV, remnants of foundation wall	Leuchter	0.0
15	Crematorium IV, remnants of foundation wall	Leuchter	2.3
16	Crematorium IV, remnants of foundation wall	Leuchter	1.4
17-19	Crematorium IV, remnants of foundation wall	Leuchter	0.0
20	Crematorium IV, remnants of foundation wall	Leuchter	1.4
21	Crematorium V, remnants of foundation wall	Leuchter	4.4
22	Crematorium V, remnants of foundation wall	Leuchter	1.7
23,24	Crematorium V, remnants of foundation wall	Leuchter	0.0
25	Crematorium I, mortuary ('gas chamber')	Leuchter	3.8
26	Crematorium I, mortuary ('gas chamber')	Leuchter	1.3
27	Crematorium I, mortuary ('gas chamber')	Leuchter	1.4
29	Crematorium I, mortuary ('gas chamber')	Leuchter	7.9
30	Crematorium I, mortuary ('gas chamber')	Leuchter	1.1
31	Crematorium I, mortuary ('gas chamber')	Leuchter	0.0
1	Crematorium II, mortuary 1 ('gas chamber')	Rudolf	7.2
2	Crematorium II, mortuary 1 ('gas chamber')	Rudolf	0.6
3	Crematorium II, mortuary 1 ('gas chamber')	Rudolf	6.7/0.0
3	Crematorium II, mortuary 1 ('gas chamber')	Ball	0.4
4	Crematorium III, mortuary 1 ('gas chamber')	Ball	1.2
5	White Farm House, remnants of foundation	Ball	0.07
6	Crematorium V, remnants of foundation wall	Ball	0.1
32	Delousing Room B1a BW 5a, inside	Leuchter	1,050.0
9	Delousing Room B1a BW 5a, inside	Rudolf	11,000.0
11	Delousing Room B1a BW 5a, inside	Rudolf	2,640.0/1,430.0
12	Delousing Room B1a BW 5a, inside	Rudolf	2,900.0
13	Delousing Room B1a BW 5a, inside	Rudolf	3,000.0
14	Delousing Room B1a BW 5a, outside	Rudolf	1,035.0
15a	Delousing Room B1a BW 5a, outside	Rudolf	1,560.0
15c	Delousing Room B1a BW 5a, outside	Rudolf	2,400.0
16	Delousing Room B1b BW 5b, outside	Rudolf	10,000.0
17	Delousing Room B1b BW 5b, inside	Rudolf	13,500.0
18	Delousing Room B1b BW 5a, wood from door jamb	Rudolf	7,150.0
19a	Delousing Room B1b BW 5b, inside	Rudolf	1,860.0
19b	Delousing Room B1b BW 5b, inside	Rudolf	3,880.0
20	Delousing Room B1b BW 5a, inside	Rudolf	7,850.0
22	Delousing Room B1b BW 5a, inside	Rudolf	4,530.0
1	Delousing Room B1b BW 5b, inside and outside	Ball	3,170.0
2	Delousing Room B1b BW 5a, inside and outside	Ball	2,780.0
28	Crematorium I, Washroom	Leuchter	1.3
5	Inmate barracks	Rudolf	0.6
6	Inmate barracks	Rudolf	<0.1
7	Inmate barracks	Rudolf	0.3
8	Inmate barracks	Rudolf	2.7/0.0
23	Inmate barracks	Rudolf	0.3
24	Inmate barracks	Rudolf	0.1
25	Untreated brick from collapsed Bavarian Farmhouse	Rudolf	9.6/9.6
Concentrations are in mg of cyanide (CN ⁻) per kg of building material (brick, mortar, concrete, plaster). Cyanide values of less than 10 mg/kg are uncertain, samples returning values of less than 1-2 mg are considered cyanide-free. If two values are given, the second value gives the result of a control analysis performed by a different company.			

It is therefore reasonable to assume that the massively higher and longer lasting tendency of the wet and cold cement mortar of the morgues of crematorium II and III to form long-term stable cyanide compounds could easily compensate the somewhat shorter time it was exposed to the poisonous gas, if compared to the scenarios in the warm, dry and short-lasting alkaline internal walls of the delousing chambers.

It is therefore the conviction of the author that the high humidity, the relatively long lasting alkalinity of the cement plaster used in these mortuaries of crematoria II and III, in combination with the realistic homicidal gassing scenarios (high HCN concentrations, slow ventilation process) would have led to the formation of long-term stable cyanide compounds in an amount that should be easily detectable still today. Not at least because the conditions of these mortuaries are very similar to those described in the construction damage case referred to before,¹⁰² which is quoted entirely and henceforth analyzed in Appendix I of this volume.

5.3.2. Critique of Different Interpretations

There have been several ways of interpreting these results which I shall summarize and criticize here briefly.¹⁴⁹

There is a number of retorts to my findings which in my eyes are aiming with weak arguments at the wrong points. *E.g.*, Bailer^{15,23}, Markiewicz *et al.*¹¹ and Clair²⁵ have claimed that no iron blue could form in brickwork merely as consequence of hydrogen cyanide fumigation. This has been sufficiently disproved.¹⁵⁰ Instead they explain the blue color of the delousing chamber walls as paint that was applied during or after the war. However, this hypothesis fails to explain:

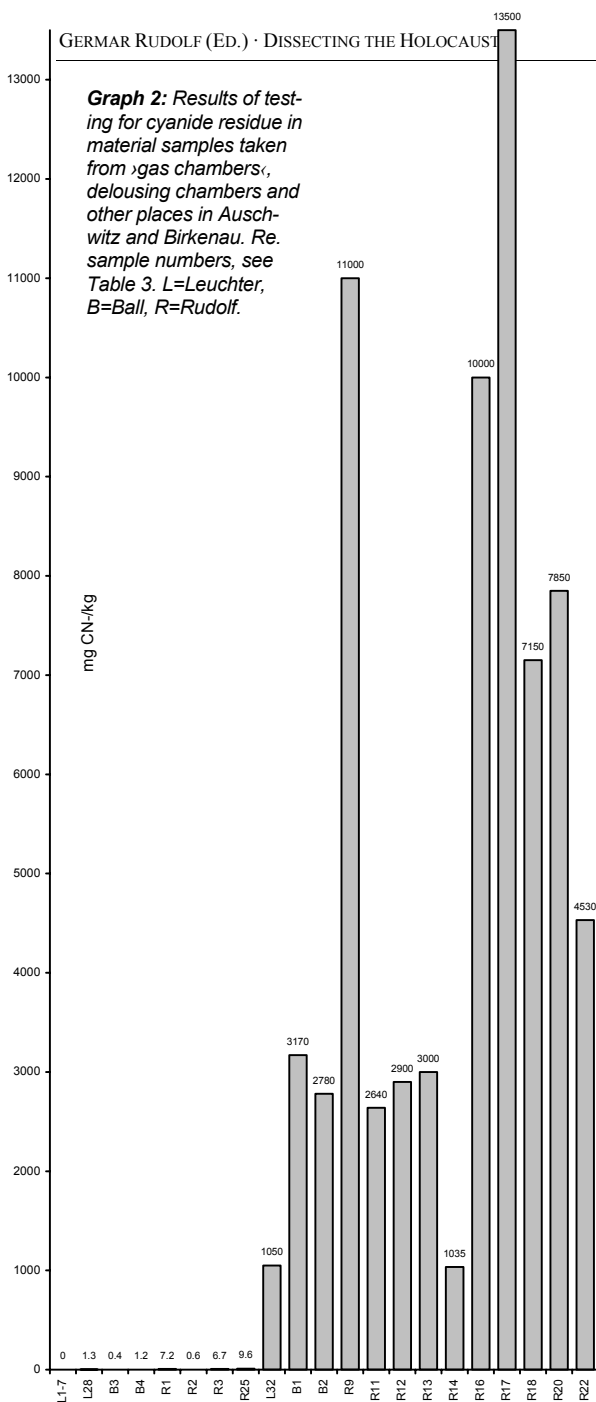
- why the blue discoloration on the inside of the walls of delousing building 5a and on the bricks of the *outside walls* of both buildings is irregular and patchy (unless the painters painted the inside as well as the outside by throwing brushes and other paint-bearing objects at the walls instead of painting normally);
- why the inside dividing walls that were added to Building 5a after this facility was discontinued as hydrogen cyanide fumigation center are white, and free of hydrogen cyanide compounds (unless someone decreed that these walls should not be painted to match the splotchy appearance of the other walls);
- why the southern dividing wall of Building 5a, which is located entirely within the building, exhibits only a pale blue color despite a high cyanide content, and why the plaster of Building 5b, while containing similar concentrations of cyanide, is even plain white (unless what was used to paint these walls was not Prussian Blue, *i.e.*, iron blue, but Cyanide White – which has yet to be invented);
- why the deeper, subsurface(!) layers of the walls of the delousing chamber in Building 5b are a greenish blue, and saturated with cyanide compounds (unless for some inexplicable reason the mortar used for these walls was dyed blue before being used);
- why only those chambers in Auschwitz, Birkenau, Majdanek¹⁵¹ and Stutthof¹⁵² (!) which were used for HCN fumigation have a patchy blue color (where nobody could admire it) and all other walls in all the camps were just painted with white chalk color;

¹⁴⁹ For a detailed discussion see the updated version of my report on the Internet, note 19 and 27, as well as my article, note 29.

¹⁵⁰ G. Rudolf, *The Rudolf Report*, *op. cit.* (note 27), pp. 269-273; G. Rudolf, in H. Verbeke, *op. cit.* (note 12) and G. Rudolf, *VffG*, *op. cit.* (note 25).

¹⁵¹ See J. Graf and C. Mattogno, *CC Majdanek*, *op. cit.* (note 30), picture section, and color picture on the back cover of this book.

Graph 2: Results of testing for cyanide residue in material samples taken from 'gas chambers', delousing chambers and other places in Auschwitz and Birkenau. Re. sample numbers, see Table 3. L=Leuchter, B=Ball, R=Rudolf.



- why there is no layer of paint with a brush-like structure indicating that the walls were indeed painted.¹⁵³

The fact is that the walls of the delousing buildings are saturated through and through with hydrogen cyanide compounds, of which only a part becomes visible as iron blue, predominantly in damp areas and at the surfaces due to accumulation processes. These facts can be explained only as a result of fumigations with HCN.

Another attempt at explaining the difference of the results between alleged execution 'gas chambers' and delousing chambers was somewhat more complicated. As mentioned before, humans are more sensitive to HCN than are insects. Holocaust advocates argue that the execution gassings were performed using only very little hydrogen cyanide, and that they did not take nearly as long as the delousing fumigations of material objects, which often took many hours.¹⁵⁴ These two factors – low concentrations of HCN and shorter fumigation times – resulted in a lack of residue formation.^{10,13,15,155}

If one recalls our previous findings regarding the quantities allegedly used (similar to those for delousing fumigations) and the problems of ventilation, which would have taken hours, if not days, then it is quite clear

¹⁵² See J. Graf, C. Mattogno, *Concentration Camp Stutthof and its Function in National Socialist Jewish Policy*, Theses & Dissertations Press, Chicago, IL, 2003, picture section (online: vho.org/BG/Books/css), and the color picture on the back cover of this book.

¹⁵³ Only a few portion of color paint is the coloring pigment, the rest is diluting filler/carrier material, which, however, cannot be found on these walls.

¹⁵⁴ A. Breitwieser, Head of the Inmate Clothing Depot in Auschwitz, tells of round-the-clock fumigations at the German supply depot, H. Langbein, *Der Auschwitz-Prozeß*, op. cit. (note 127), p. 786.

¹⁵⁵ R.J. van Pelt, op. cit. (note 28), p. 298, who is otherwise merely parroting what others have said, especially Markiewicz *et al.*, op. cit. (note 11).

that this assumption needs wrong premises. The results of the chemical analyses can therefore not be explained in this way.

G. Wellers was the first to advance the theory that the victims had absorbed all the hydrogen cyanide by respiration.¹⁵⁶ This theory has already been clearly refuted in section 4.2.2.1.

Ignoring the scientific facts as summarized here in section 3.3.2., Markiewicz *et al.*¹¹ and van Pelt¹⁵⁶ have wrongly claimed that iron blue would disappear when exposed to environmental conditions.

A new corny joke was recently added to this debate by Prof. James Roth from the Alpha Analytic Laboratories, Ashland, Massachusetts. I discuss this event here because Prof. Roth's allegations were widely publicized by the international media in connection with the libel case of British historian David Irving against Deborah E. Lipstadt.¹⁵⁷

In 1988, Roth's laboratory had analyzed the masonry samples from the alleged ‘gas chambers’ taken by Leuchter in Auschwitz for their cyanide content. During the trial against Ernst Zündel in Toronto that same year, for which the Leuchter report had been produced, Prof. Dr. Roth himself was interrogated as an expert witness. Ten years later, Errol Morris interviewed Roth about this event for his documentary movie *Mr. Death* on Fredrick A. Leuchter. During this interview, Prof. Roth did all he possibly could to distance himself from the possible consequences of the analyses performed by his company. His interview gained importance only due to the fact that the Dutch architectural historian Prof. Robert van Pelt quoted Roth in his 1999 expert report prepared for the Irving trial. In it, van Pelt wrote about Roth's statements in Morris' movie:¹⁵⁸

“Roth explained that cyanide will react on the surface of brick or plaster, penetrating the material not more than 10 microns, or 0.01 mm, or one tenth the thickness of a human hair [...]. In other words, if one wants to analyze the cyanide concentration in a brick sample, one should take a representative sample of the surface, 10 microns thick, and no more.”

It can be shown that Prof. Dr. James Roth is wrong for the following reasons:

1. It is a fact that the walls of the disinfestation chambers in Auschwitz, Birkenau, Stutthof, and Majdanek are saturated with cyanide compounds, and this not only superficially, but into the depth of the masonry, as I have proved by taking samples from different depths of the wall, compare in this regard especially my samples no. 11, 13, 17, 19b, and 23. They prove that hydrogen cyanide can rather easily reach deep layers of plaster and mortar. But even the other samples taken from the surface prove that Prof. Roth's allegation is wrong: Provided that most of the cyanide detectable today is present in the form of iron cyanide (Iron Blue and other cyanoferrates), as Prof. Roth assumes himself, his thesis would mean that 10% to 75% of the iron content of these samples are located in the upper 10 micrometer of my samples (0.010 mm), *i.e.*, they are located in less than 1% of the entire sample mass, and the rest of the sample would have been massively deprived of iron. How this migration of a major portion of iron to a thin surface layer would have happened is inexplicable to me.
2. Furthermore, expert literature is detailed in that
 - a. hydrogen cyanide is a extremely mobile chemical compound with physical properties comparable to water,¹⁵⁹
 - b. which can quite easily penetrate through thick, porous layers like walls.⁹⁸
3. In addition, it is generally known that cement and lime mortar are highly porous materials, comparable for instance with sponges.¹⁶⁰ In such materials, there does not exist something like

¹⁵⁶ *Ibid.*, p. 306.

¹⁵⁷ This claim played a role in the verdict which should not be underestimated, cf. judgment Gray in court case of note 28.

¹⁵⁸ *Pelt Report, op. cit.* (note 28), p. 307.

¹⁵⁹ W. Braker, A. L. Mossman, *Matheson Gas Data Book*, Matheson Gas Products, East Rutherford 1971, p. 301.

a defined layer of 0.01 mm beyond which hydrogen cyanide could not diffuse, as there can also be no reason, why water could not penetrate a sponge deeper than a millimeter. Steam, for example, which behaves physically comparable to hydrogen cyanide, can very easily penetrate walls.

4. Finally, the massive discolorations of the *outside* walls of the disinfestation chambers in Birkenau and Stutthof, as shown on the cover of this book, are clearly visible and conclusive evidence for the fact how easily hydrogen cyanide and its soluble derivatives can penetrate such walls.

As a professor of analytical chemistry, Prof. Roth must know this, so one can only wonder why he spreads such outrageous nonsense. That Prof. Roth is indeed a competent chemist can be seen from what he said during his testimony under oath as an expert witness during the above mentioned Zündel trial.¹⁶¹

"In porous materials such as brick or mortar, the Prussian blue [recte: hydrogen cyanide] could go fairly deep as long as the surface stayed open, but as the Prussian blue formed, it was possible that it would seal the porous material and stop the penetration."

It is also revealing that Prof. Roth mentioned during this interview, if he had known where Leuchter's samples originated from, his analytical results would have been different. Such an attitude is exactly the reason why one should never tell an 'independent' laboratory about the origin of the samples to be analyzed. What Prof. Dr. Roth has demonstrated here is only his lack of professional honesty.

Another strange story is that of Richard Green, a PhD Chemist with quite similar educational background as I have.²⁶ The layman would expect two experts with similar educational background to come to similar conclusions in questions relating to their expert knowledge. But this is only partly the case. The reason for this is that Dr. Green ignores many facts that are either supported by documentary evidence – like the performance of the ventilation installed in crematoria II and III, or the speed of executions in U.S. execution chambers – or by expert literature – like the higher tendency of cold, moist walls to adsorb HCN, and the longer lasting alkalinity of cement mortar compared to lime mortar.

However, Dr. Green makes some concessions which are important to note:

- a) He agrees that basically all witnesses attest to very short execution times, indicating a rather high concentration of HCN used.
- b) He also agrees *"that Rudolf is correct or nearly correct regarding the formation of blue staining in the delousing chambers."*

What he does challenge, though, is the possibility of formation of any noticeable quantities of Iron Blue in the homicidal 'gas chambers.' One of his flawed and deficient arguments to support his thesis is that in his view, no noticeable amounts of cyanide could have accumulated in the walls of the

¹⁶⁰ DIN 4108, part 3 to 5, deals with diffusion of steam into building materials. The most important coefficient for building materials is the so-called coefficient of diffusion resistance; this is a dimensionless number indicating, how much longer the diffusion of steam takes to penetrate a layer of certain materials compared to the time it takes to diffuse through the same layer of still air. This coefficient is valid not only for water vapor, but also for gaseous hydrogen cyanide as well as for any other gas. In the list of 100 different building materials compiled in DIN 4108 part 4, one can find lime and cement mortar with diffusion resistances from 15 to 35, in which case the resistance grows with increasing cement content, for gypsum plaster, the coefficient is 10, for brick walls 5 to 10, for glass wool mats it is 1. That means, if a gas diffuses through a layer of still air with a speed of 1 cm per second, it does take 15 to 35 seconds to diffuse through a 1 cm thick layer of lime or cement mortar and 5 to 10 seconds to diffuse just as deep into a brick wall. (I am grateful to Mr. C.H. Christmann for this reference.)

¹⁶¹ Kulaszka (ed.), *Did Six Million Really Die? Report on the Evidence in the Canadian "False News" Trial of Ernst Zündel – 1988*, Samisdat Publishers Ltd., Toronto 1992, p. 363 (protocol p. 33-9291).

morgues (‘gas chambers’). According to Dr. Green, one major factor for this is supposed to be the fact that masonry has a neutral pH value which prevents the formation of cyanide salts. But if that were true, how come huge amounts of cyanides did accumulate in the walls of the disinfection chambers?

My argument in this regard is that particularly cement plasters and concretes, as used in morgues 1 of crematoria II and III, are noticeably alkaline for many weeks, months, or even years, which I documented thoroughly with expert literature on the chemistry of building materials.¹⁶² Hence, I concluded that these walls would have been very much inclined to accumulate cyanide salts and to form Iron Blue, even more so than the lime plaster of the disinfection chambers, which in turn provoked the following answer by Dr. Green:

“[In 1993] *The IFRC* [Institute for Forensic Research, Cracow], on the other hand measured the pH [of mortar samples from the alleged gas chambers] to be between 6 and 7 [i.e. neutral].”

Dr. Green obviously did not consult any literature on the chemistry of building materials, as he quotes none. He solely relies on the findings of the Krakow institute. In order to make the reader see how flawed Dr. Green’s way of arguing is, let me say it in a parable:

By referring to a couple of Italian expert pizza baking instructions, I showed that a pizza, when taken out of the oven, is hot or warm for quite a while (one hour). Now, Dr. Green comes along claiming that I am wrong because a Polish friend of his has just now measured the temperature of a pizza which was baked a week ago, and which has been lying around somewhere since. And the Polish scientists found out that this pizza is indeed cold right now. Surprise, surprise! What does the pH value of samples taken 50 years after the erection of these building prove regarding their pH value shortly after they were built? Dr. Green’s way of arguing is childish to the highest degree.

5.4. A serious attempt of deception

Many exterminationists rely heavily on the results of the Krakow Institute of Forensic Research, i.e., the work of Markiewicz and colleagues as published in 1994. These Poles have conducted their analyses with a method which is not able to detect iron cyanide compounds. They did this because they allegedly didn’t understand how such compounds could possibly form:¹¹

“It is hard to imagine the chemical reactions and physicochemical processes that could have led to the formation of Prussian blue [= iron blue, G.R.] in that place.”

Has anyone ever heard that the non-understanding of a phenomenon is a reason for not examining it? For the Poles it obviously was. And even more: They did not even try to refute the theory I presented in one of my publications of spring 1993.¹⁶³ They knew of this publication, since they quoted it, but only as an example of the alleged evil deeds of the deniers and whitewashers of Hitler, whom they intend to refute. That should be enough to show that the intention of the Poles is highly ideologically biased. If they were neutral scientists, they would not care about the dirtiness of Hitler’s laundry.

Moreover, they did not even make an attempt to explain what might be responsible for the high iron cyanide content of the wall’s plaster, the inner mortar, and even the outside bricks as well as their patchy blue coloring without any presence of paint.

Even though they had tampered with the analysis method, when testing their first series of samples, it turned out that only one sample taken from an alleged homicidal ‘gas chamber’ had minimal cyanide residues, in contrast to the samples taken from a delousing chamber. Hence, the Poles sup-

¹⁶² See chapter 6.7.2. of *The Rudolf Report*, op. cit. (note 27).

¹⁶³ E. Gauss, *Vorlesungen zur Zeitgeschichte*, op. cit. (note 18), pp. 163-170; 290-294.

pressed these findings¹⁶⁴ and took more samples,¹¹ until they found what they were looking for. This time, the samples from both the delousing chambers and the alleged homicidal ‘gas chambers’ showed extremely low but comparable amounts of short-term stable cyanide residues. But at least they established that wet cement mortar absorbs much more than 10 times as much HCN than dry lime mortar does, as I assumed in my extrapolations. In the following table, I compare the results as obtained by the Poles, by Leuchter and by me:

Table 4: Comparison of the order of magnitude of analyses results of different samples				
AUTHOR:		MARKIEWICZ ET AL.	LEUCHTER	RUDOLF
DETECTION OF:		Cyanide without Iron Cyanides (Short-term Stable Cyanides)	Total Cyanide	Total Cyanide
LOCATION				
DELOUSING CHAMBERS:		0 - 0,8 mg/kg	1,025 mg/kg	1,000 – 13,000 mg/kg
ALLEGED GAS CHAMBER:		0 - 0,6 mg/kg	0 - 8 mg/kg	0 - 7 mg/kg

Even after confronting them with my arguments about their work,¹⁶⁵ the Poles refused to give any explanation for their unscientific behavior. Dr. Markiewicz, who is not a chemist but a “*Specialist for Technical Testing*”, died in 1997. The remaining two co-authors, W. Gubala and J. Labedz, have been silent about that ever since, like thieves hiding in the night.

It is also indicative that these Polish authors have an ardent supporter in Dr. Green. Although Dr. Green agrees with me that the Iron Blue found in delousing chambers is the result of gassings with hydrogen cyanide, he refuse to acknowledge that the approach of the Krakow team to exclude Iron Blue from the analysis was fraudulent. No matter which results the Polish scientists produced and what their scientific opinion might have been: their behavior is extremely unscientific, as **the most important task of a scientist is to try to understand what has not been understood so far, and to discuss the attempts of others to make understandable**. The Polish scientists did just the opposite: they decided to ignore and exclude what they did not understand.

And the amazing thing about Dr. Green is that he – and with him Prof. van Pelt, who relies on Green¹⁶⁶ – does not only defend Prof. Markiewicz’s behavior in every regard, but he attacks me for my critique against the Polish scientists, while omitting *all the reasons* I gave for doing so. To crown this, Dr. Green even defends the fact that Prof. Markiewicz never even bothered to address any of my critique, even though addressing critiques is paramount for scientists. Dr. Green argues:

“*Rudolf complains that Markiewicz et al. have not responded to his queries. Why should they do so? What credibility does Rudolf have, that demands they answer his every objection no matter how ill-founded?*”

However, since Dr. Green agrees that the Iron Blue detectable in disinfestation walls *is* the result of gassings with Zyklon B, he himself has indirectly admitted that all my objections against Markiewicz’s method of analysis are well-founded, *i.e.*, just the opposite of “*ill-founded*”.

¹⁶⁴ The first paper of J. Markiewicz, W. Gubala, J. Labedz, B. Trzcinska, was never published by themselves, but only by Revisionists, as this paper leaked out of the Jan Sehn Institute in 1991: “*An official Polish report on the Auschwitz ‘gas chambers’*”, *The Journal of Historical Review*, Summer, 11(2) (1991), p. 207. (online: vho.org/GB/JHR/11/2/IHR207-216.html), for details see Gernar Rudolf, “*A fraudulent attempt to refute Mr. Death*”, online only: vho.org/GB/Contributions/Fraudulent.html.

¹⁶⁵ G. Rudolf, in H. Verbeke (ed.), *op. cit.* (note 12), pp. 81-90; for an Engl. summary cf. G. Rudolf, “*Some considerations about the ‘Gas Chambers’ of Auschwitz and Birkenau*”, heitherto unpubl. paper presented at the 1st Australian Revisionist Conference, Adelaide, August 9, 1998, (online: vho.org/GB/Contributions/Green.html) as a reaction on an online-critique by Richard J. Green, *op. cit.* (note 26).

¹⁶⁶ Robert J. van Pelt, *The Case for Auschwitz. Evidence from the Irving Trial*, Indiana University Press, Bloomington/Indianapolis 2002.

And why does Dr. Green think I bear no credibility demanding a discussion of any of my arguments? Not because I lack scientific qualifications. No, he thinks I am an abomination because of my views, and because I have been subject to social persecution and political prosecution, leading to the total destruction of my social existence, my reputation, and finally my freedom. Dr. Green even resorts to calling me a “*liar*,” “*obfuscator*,” and “*hater*” because of my different well-founded opinions.

The scheme is as follows: first, people like Dr. Green attempt to do everything to destroy my reputation by name-calling, persecution, and prosecution, and when they succeed, they claim that there is no need to discuss anything with me anymore, since I do not have any reputation and credibility anyway. This way they can nicely ignore any argument refuting their flawed thesis. And they have the chutzpah to call themselves righteous scientists and to call me a pseudo-scientific liar and obfuscator of the truth.

Dr. Green unconditionally defends the scientific frauds from the Krakow institute, and both get away with it, because in the eyes of the public, both have the ‘politically correct’ ‘scientific’ opinion about Auschwitz. Birds of the same feather flock together.

The same behavior as the Polish scientists, Dr. Green, and Prof. Pelt exposed was shown by the Pope’s Holy Inquisitor Cremonini who refused to look through Galileo’s telescope to see Jupiter’s moons revolving around Jupiter, because he could not – or did not want to – understand what Galileo was saying – since he did not like the consequences for his worldview, which is: if moons revolve around Jupiter, then our Earth might revolve around the sun. Markiewicz, Dr. Green, and van Pelt do the same thing: They refuse to use a ‘telescope’ that enables them to see Iron Blue ‘revolving around the delousing chambers’, because they do not like the impact this has on their worldview: if Iron Blue ‘revolves around the delousing chambers’, then Iron Blue might be expected to ‘revolve around homicidal gas chambers’ as well. And they do not like that at all, because due to lack of Iron Blue, that opens doubts about the reality of the claimed homicidal gas chambers.

What we must conclude is the following: The only ‘scientific’ attempt to refute Fredrick A. Leuchter’s most intriguing thesis turns out to be one of the biggest scientific frauds of the twentieth century. How desperate must they be – those who try to defend the established version of the Holocaust, *i.e.*, the alleged systematic extermination of Jews in homicidal ‘gas chambers’ – that they resort to such obviously fraudulent methods?

5.5. The Limits of the Chemical Method

The latest trend in the establishment school of thought is towards altering various factors relating to the homicidal gassings, even if this is in crass contradiction to the eyewitness testimony or the technical facts.

Only a few years ago it was still the norm to speak of daily, even of continual gassings,¹⁶⁷ but the recent, drastic reductions in the numbers of victims, down to at most 630,000,¹⁶⁸ 470,000 to 550,000,¹⁶⁹ or even 356,000 gassing victims,¹⁷⁰ have resulted in the revised assumption of considerably fewer gassings per ‘gas chamber’ – and in fact, some estimates have been reduced to only a few ten-thousand victims per chamber.¹⁷¹

¹⁶⁷ *E.g.*, the testimony of M. Buki in the Frankfurt Auschwitz Trial, H. Langbein, *Der Auschwitz-Prozess*, *op. cit.* (note 127), p. 96.

¹⁶⁸ J.-C. Pressac, *Les Crématoires d'Auschwitz*, ..., *op. cit.* (note 21), p. 148.

¹⁶⁹ J.-C. Pressac, *Die Krematorien von Auschwitz*, ..., *op. cit.* (note 21), p. 202.

¹⁷⁰ F. Meyer, *op. cit.* (note 124).

¹⁷¹ Personal communication, I. Semyda, Greenwich, CT, USA.

Further, there is a trend, demonstrated above, to reduce noticeably the quantities of hydrogen cyanide allegedly used, contrary to what witnesses claim.¹⁷²

Taking all these hypothetically, conceivably marginal requirements into consideration, it would be possible to arrive at a point where the duration for which the hydrogen cyanide was in contact with the cool and damp walls of mortuaries 1 of crematoria II and III was in fact so short that even a vague prediction of the results yielded by chemical analyses is no longer possible.

By this process the historians of the establishment in fact declare the eyewitness statements regarding the number of victims and the execution conditions to be unbelievable, and they ignore the circumstance that crematoria II and III had no holes through which the Zyklon B could have been introduced. But what do most historians care about factual arguments? They evidently have their ironclad opinion, and that's all there is to it.

However, chemistry is not the right science to find a *definite* answer to the questions whether homicidal gassings took place in Auschwitz and Birkenau or not, simply because the data we have, especially when coming from 'eyewitnesses', are insufficient and imprecise. But our chemical results show at least a high probability that the eyewitness statements about mass gassings are false.

6. Conclusions

Examination of the construction of the facilities allegedly used for the mass gassings has shown that the alleged main 'gas chambers' of Auschwitz – the mortuary of the Main Camp crematorium, and the mortuaries 1 (the 'gas chambers') of crematoria II and III – had no contrivances for the introduction of the poison gas substance. The holes visible in the ceilings today were added after the war. If these findings remain unrefuted, this alone renders any mass gassings, as these have been attested to, entirely impossible.

The examination of the formation and long-term stability of hydrogen cyanide residue in the walls of the facilities in question ('gas chambers' and delousing chambers for material objects), as well as the interpretation of the results of analysis of brick samples from these facilities in Auschwitz, have shown:

1. Hydrogen cyanide which reacts to form iron blue in the brick walls, etc. remains stable for many centuries. Its disintegration requires a time frame similar to that of the brickwork itself. Therefore, cyanide residue – if formed – ought still to be present in virtually undiminished quantities today, regardless of weathering effects. The outside walls of the delousing buildings BW5a/b in Birkenau, which are still blue on the outer surface today, as well as being high in cyanide content, serve to prove this.
2. Under such conditions as would actually be possible, the attested-to mass execution gassings with hydrogen cyanide probably would result in the rooms in question exhibiting cyanide residue on a similar scale as is the case in the disinfestation chambers for material objects, including the resultant blue discoloration of the walls.
3. In fact, however, the alleged 'gas chambers' exhibit only insignificant traces of cyanide residue, on the same order of magnitude as may be found in any other building.

Therefore, it is my conviction that the only conclusion which can explain all factors involved is that in the facilities alleged, no mass gassings with Zyklon B can have occurred under the conditions attested to by alleged eyewitnesses, court witnesses, journalists, academics or other popularizers.

¹⁷² A hypothetical gassing scenario would proceed very differently if it could actually involve something that is occasionally alleged, namely that the Zyklon B was lowered into the gas chambers of crematoria II and III in nets, so that it could be quickly removed again after the victims had expired. This would have allowed for a more rapid ventilation of the chamber. But since this theory flounders on the nonexistence of the Zyklon B input hatches, we shall ignore it.