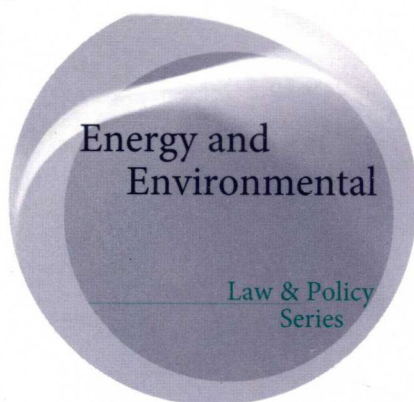


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The Implementation of the Seveso Directives in an Enlarged Europe

A Look into the Past and a Challenge for the Future

Edited by Barbara Pozzo



Wolters Kluwer

Law & Business

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The Implementation of the Seveso Directives in an Enlarged Europe

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VOLUME 6

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The aim of the Editor and the Editorial Board of this series is to publish works of excellent quality that focus on the study of energy and environmental law and policy.

Through this series the Editor and Editorial Board hope:

- to contribute to the improvement of the quality of energy/environmental law and policy in general and environmental quality and energy efficiency in particular;
- to increase the access to environmental and energy information for students, academics, non-governmental organizations, government institutions, and business;
- to facilitate cooperation between academic and non-academic communities in the field of energy and environmental law and policy throughout the world.

Foreword

*Achille Cutrera**

The FLA Study and the Thirtieth Anniversary of the Disaster

This volume presents a study carried out by Fondazione Lombardia per l'Ambiente (FLA) that offers a historical reconstruction of the Icmesa accident (which took place thirty years ago) and the effects that ensued in the years that followed; it also analyzes the legislation passed during this time span regarding the so-called 'industrial chemical risk'.

In particular, the Lombardy Region played a key role. In addition to being involved along with the Italian government in the settlement of the legal dispute with Givaudan Spa of the La Roche Group, owner of the Icmesa factory, the Region undertook an extensive and complex reconstruction of the landscape, which ended with the realization of the 'Bosco delle Querce' in Seveso, a forty hectare park that stands in the area significantly affected in the past by dioxin pollution. Moreover, in 1986 the Region sponsored, together with the Universities of the Region, the establishment of the 'FLA', whose statute indicates its underlying objectives.

FLA has dedicated a series of studies, surveys, and technical and scientific analyses to the Seveso accident, always perceiving an ideal, moral, and scientific relationship with the people and institutions who at that time handled the emergency. In 1996, FLA published the contents of its studies ('Seveso 20 anni dopo' (Seveso twenty years later) – FLA dossier n. 32) and organized an international

* Former Member of the Senate of the Italian Republic and Vice President of the Fondazione Lombardia per l'Ambiente 2009.

conference at the State University of Milan. Even this publication falls under the constant and continuative commitment of FLA.

Community Legislation Concerning Industrial Chemical Risks Following the Seveso Disaster

After the accident, the European Community enacted Directive 82/501 (the so-called 'Seveso 1') 87/216 and 96/82 (the so-called 'Seveso 2'), with which the general principles concerning the prevention and participation / information were established. In this perspective, the Single European Act of 1986, which for the first time acknowledged the existence and peculiarity of a 'Community measure in the environmental field', was introduced. Moreover, Community legislation became part of a framework of domestic settorial legislations that differed one from another, thus determining the harmonization of existing legislation and even the creation of a new legislative sector, thanks to the implementation of the Directives. This was certainly a significant experience: without the supra-ordinate imposition of the EU, Italy probably would have not adopted such a strict regulation. In fact, the Italian government later promulgated Presidential Decree n. 175/1988 and Legislative Decree n. 334/1999.

The analysis made by FLA enables us to assert that the Seveso disaster gave the opportunity to the European Economic Community (EEC), later known as EU, to elaborate an important field of environmental law concerning the regulation of industrial plants subject to a high risk of accidents. The acceleration of industrial chemical manufacture in Europe, the excessive discharge of chemical substances in the environment, the progress made in technology, and the claims for adequate protection both by workers as well as by the population have encouraged a thorough regulation of the phenomenon. The aspects involved are numerous: from the relation between industrial activity and its distribution on the territory to the definition of the borderline between free enterprise in the chemical industry and the need to protect human health.

Another aspect of Community legislation underscores the effort made by the scientific community in the 1970s and 1980s to thoroughly study information gathered on certain toxic substances and the level of protection offered by single legal systems.

This new legislative perspective is characterized by particular aspects, and therefore for: (a) the originality and peculiarity of the subject matter to be safeguarded; (b) the extent of individuals specifically involved; (c) the interrelations between localization of factories and the urban and interurban territorial context of reference; (d) the peculiarity of classification given by the administrative order to each source of risk in relation to the potentiality of substances involved.

As a matter of fact, the particularity of legislation in this area reflects the trend of environmental legislation at a regional, national, and Community level, considering that Italy has no 'general environmental law', but a series of sectorial and special legislation for the protection of certain environmental sources (fauna, water, air, land, etc.).

The Icmesa Case in Relation to the Swiss Confederation

The Seveso disaster confirmed the need to protect against industrial chemical risks *across the boundaries*, considering that it highlighted the transnational impact deriving from events involving high-risk industrial plants. Originally, Icmesa had declared that the Seveso plant would have exclusively been used to 'manufacture pharmaceutical products', but when it started to produce trichlorophenol (TCP) in 1969, the company failed to inform anyone, that is, neither the workers nor the local population. This occurred owing to the lack of legislation in Italy concerning the production of hazardous substances: Swiss legislation had had its own legislation since March 1969, deriving from the 'Federal law on the commerce of hazardous substances', which required specific authorization for the use of toxic substances. On the contrary, by carrying on business in Italy, Givaudan Spa had bypassed Swiss regulations and produced hazardous substances under favourable economic conditions, disregarding the well-being of the local population and territories located in proximity of the Swiss border.

This determined the grounds for compensation acknowledged by Givaudan in favour of the Italian government, based on the principle of direct liability toward mankind, which international doctrine has often appealed to concerning another terrible disaster that occurred in the sadly known atomic power plant of Chernobyl in Ukraine.

Thirty Years Later: Management of Industrial Risk in Lombardy

The Study contained in this volume identifies the state of industrial risk management in Italy and the effects produced by the consequential Community, national and regional legislation in the thirty years that have passed since the Seveso disaster. In particular, the role of industry and the competences of Regional and local bodies (which together represent a fundamental element of regulation on the territory), even from the standpoint of industrial risk management, are taken into consideration.

All information given in this Study has been collected by FLA under its own exclusive responsibility, through independent researchers, and therefore any evaluation and statistical data furnished do not involve the Lombardy Region. FLA believes that the independence of its role constitutes a precious and essential element to be safeguarded, in order to ensure the observance of the fundamental principles of freedom both in relation to the evaluation of all facts and of political, technical, and scientific acts, but also to their knowledge and disclosure, so that the lesson learned through much suffering approximately thirty years ago may become public in the best way possible.

Introduction

Marzio Marzorati and Massimiliano Fratter

Since 10 July 1976, the city of Seveso has attempted to deal with the disaster caused by the toxic dioxin cloud produced by the Icmesa factory in Meda, by encouraging educational and group projects, increasing available human capital, and supporting the process of subsidiarity and responsibility in the local community.

The perception of the environmental disaster, as well as the danger, the risk, and the need to lay the blame on and to find the cause of the aforesaid, determined contrasting opinions in the Seveso community. This gave way to diverse interpretations, attitudes, and visions of the world that appeared to be irreconcilable: for some the disaster was a misfortune, for others a crime connected to the capitalist system of production, for others an economical damage, for others the fear of illness and illness itself, for others a moral question; and for others a relational, political, social, and environmental issue.

However, damage was done, and together with the aforesaid, an underlying tension, characterized by a sense of expiation and above all the social need to remove the event, remained in the air. Some inhabitants of Seveso, and in particular the local members of Legambiente, immediately perceived that the environmental damage caused by the release of a toxic cloud would cause serious social-environmental damage to the Seveso community, and that new supplementary and community social policies were required; social cohesion, both economical and relational, became a vital objective.

Starting from these considerations, as time passed, a process of 're-appropriation of past memories' gave birth in 2001 to 'Ponte della Memoria' ('Bridge of Memory'), a historical-scientific research project that focused its attention on reconstructing the 'Seveso' case.

'Ponte della Memoria' has enabled us to look back on thirty years of history; it has created the essential condition to open a channel to listen to and exchange

opinions with the local community, in order to talk about *Seveso* to the Seveso community and to realize daily ecological maintenance works *starting from Seveso*.

The Bridge, built thanks to the joint efforts of the Seveso municipality, Fondazione Lombardia per l'Ambiente and Legambiente Lombardia, is a metaphor for an environment that must be socially desired.

The bridge, today, more than thirty years following the disaster, allows us to also narrate an experience in Europe and in compliance with the three European Directives that are named after Seveso. The Bridge is a metaphor for an environment that must be socially desired.

The Story of the Accident, the Narration of the Risk

Saturday, 10 July 1976, 12:37 p.m. Icmesa Factory. Meda. Following the rupture of the safety disk of reactor 'A 101', a toxic cloud was released as a result of an exothermic chemical reaction.¹ The cloud was composed of tetrachlordibenzo-dioxin (TCDD) and by other toxic substances, but this has yet to be proved.

Sunday, 11 July 1976, 5:00 p.m. The mayor of Seveso, Francesco Rocca, received the visit of two Icmesa technicians who informed him of the factory accident, which had occurred the day before.² Rocca recalled:

The description of the accident was brief, mainly of a technical nature. That was the first time I had heard of trichlorophenol – tcf. 'It is an base intermediate chemical product' immediately explained dr. Paoletti. 'You can also find it at the grocer's, since it is also used as a herbicide. The reactor which produces it exploded. Nobody knows exactly why this happened. Yesterday morning at six, at the end of the last shift, as usually happens every Saturday, the reactor was left to cool down. The day after, production of tcf would have resumed regularly, if this uncontrolled reaction had not occurred, causing a gradual increase in temperatures and pressure, culminating in an explosion which took place a little after noon.'³

The persons in charge of the factory decided to inform the mayors of the two municipalities concerned the day after the accident, and the mayor of Meda, Fabrizio Malgrati, was contacted upon request of Rocca.⁴ Nevertheless, the Icmesa executives attempted to minimize the event and made no reference, either as a hypothesis, to the release of dioxin.⁵ The same elusive behaviour was kept by the company located in Meda during the following days.

1. *Final report of the Parliamentary Inquiry on Seveso*, 109.

2. Rocca Francesco, *I giorni della diossina*, Milan, 1980, 14.

3. *Ibid.*

4. *Ibid.*

5. *Ibid.*, 106. With respect to the delay in reporting the accident, reference should be made to Roche in *'Seveso Twenty Years after'*, which claimed that the persons in charge at Icmesa had attempted to contact the Health Officer of Seveso on the same day and phoned the carabinieri of Meda at 8:30 p.m. Saturday, 10 July. In this regard, while the Parliamentary Inquiry (cf. *Final report of the Parliamentary Inquiry*, *supra* n. 1, 106) and s. II of the Criminal Division of the Appeals

In this regard, Icmesa sent a shocking letter on 12 July 1976 to the Health Officer, Dr Uberti, who was substituting for the person in charge, Professor Ghetti, who was on holiday:⁶

With reference to previous information, interviews and today's visit, we hereby confirm the following:

Saturday 10 July 1976 at approx. 8:00 p.m. an accident within our factory occurred. [...] The causes of the accident are still being examined. As of now we presume that the event resulted from an unaccountable exothermic chemical reaction in a reactor which was undergoing cooling-down procedures. The reactor contained the following materials: tetrachlorobenzene, ethylene glycol and caustic soda which together produce raw trichlorophenol.

At the end of the usual working hours (at 6:00 a.m. on Saturday) the reactor was left still and without heating, and as usual contained raw products.

We have no idea what happened before 12:40 p.m., when the safety disk ruptured, releasing a vapor cloud which, after having surrounded the plants within the Factory premises, moved south-east, carried by the wind and dissolved in a short period of time. Unable to identify the substances carried away by the fumes and their precise effect, we immediately warned the neighbouring families not to eat garden vegetables, even though the finished product is also used in herbicides. For the time being, we have interrupted production, concentrating our efforts in finding answers to what happened, so as to avoid the occurrence of a similar event in the future.⁷

The behaviour of the Meda company was of a malicious nature.⁸ Mr Sambeth, technical director at Givaudan, after having been informed of the accident on the following day, 11 July at 11:45 a.m., presumed that TCDD had been produced.⁹ Sambeth declared before the Parliamentary Inquiry Committee:

We had heard of similar events and I thought of this eventuality. [...] I thought and still think that there was a very high concentration of dioxin around the broken disk and a lower concentration elsewhere.¹⁰

Court of Milan (cf. Judgment of s. II of the Criminal Division of the Appeals Court of Milan, 7) had declared that the carabinieri of Meda had been informed of the event only the day after 11 July at 5:45 p.m., the 'Corriere della Sera' had proven that the carabinieri had already been informed of the event on the evening of 10 July. Cf. *Extension of the 'toxic front' at Seveso. Other children taken to hospital, large-scale death of animals*, in 'Corriere della Sera' dated 20 July 1976.

6. Rocca, *supra* n. 2, 33.

7. Seveso Municipality Archives. File nr. 1129, category 15, class 8.

8. *Final report of the Parliamentary Inquiry Committee*, *supra* n. 1, 107. Gaetano Pecorella defined the letter of Icmesa 'an example of criminal hypocrisy' in *Icmesa. Una rapina di salute di lavoro e di territorio*. Cf. AA.VV. *Icmesa. Una rapina di salute di lavoro e di territorio*, 104.

9. *Final report of the Parliamentary Inquiry Committee*, *supra* n. 1, 107.

10. *Ibid.*, 108.

No doubt exists regarding the fact that Icmesa and Givaudan executives were immediately aware of the seriousness of the event, and notwithstanding, they *intentionally* avoided informing the competent Italian authorities.¹¹ The substitute Health Officer, Uberti, was not allowed to enter the factory on 12 July for 'safety reasons'.¹²

Scientific certainty regarding the release of TCDD was given on 14 July, thanks to the Givaudan laboratory tests conducted in Duebendorf (Zurich) on samples taken from the area surrounding the Icmesa factory.¹³ Even after having confirmed initial suspicions, both the persons in charge at Icmesa and those at Givaudan failed to inform the Italian authorities of the circumstances.¹⁴ Only eight days after, on 18 July, even though the head of the chemical laboratory of the Province of Milan warned the persons in charge at the Meda factory of the possible existence of dioxin, the arrival in Italy of the head of the Givaudan laboratory was announced, and only on 19 July 1976 did Icmesa and Givaudan decide to admit the gravity of the situation,¹⁵ officially acknowledging the presence of tetrachlordibenzo-p-dioxin among other highly dangerous substances.¹⁶

During 'the days of silence',¹⁷ that is, the five days that elapsed from the release of the toxic cloud and the first measures taken by the mayors of Seveso and Meda,¹⁸ the details of the accident emerged with more precision. The carabinieri in Meda, who carried out the criminal investigations, confirmed that the cloud was formed as the result of the rupture of the safety disk of reactor 'A 101', caused by an exothermic chemical reaction.¹⁹ The disk rupture violently discharged vapour particles of glycol and other substances through the duct.²⁰ Immediately following the explosion, Mr Galante, the head of Units 'E' and 'F',²¹ entered Unit 'B' and was surrounded by a thick cloud. Equipped with a breathing apparatus, he opened the water valve in order to cool down the reactor and activated a pump located nearby, which usually was turned off on Saturdays to avoid energy waste, in order to supply a sufficient water flow.²²

11. *Ibid.*

12. Seveso Municipality Archives. File nr. 1129, category 15, class 8.

13. *Final report of the Parliamentary Inquiry Committee, supra* n. 1, 108.

14. *Ibid.*, 109.

15. *Ibid.*

16. Sentence of Criminal Chamber II of the Court of Appeal of Milan, *supra* n. 5, 9.

17. Relazione conclusiva della Commissione parlamentare d'inchiesta [...], *Final report of the Parliamentary Inquiry Committee, supra* n. 1, 113.

18. *Ibid.*

19. *Ibid.*, 109.

20. AA.VV., *Disastro Icmesa Scienza, Pubblica Amministrazione e Popolazione di fronte alla tragedia tecnologica*, ed. Franco Angeli, Milan, 1979, 211.

21. Rocca, *supra* n. 2, 36. 'I entered Unit B, where the reactor is located', Galante said to Rocca, 'There was a big cloud. I was scared, when we heard the whistle and saw the vapor shooting up in the sky. Equipped with a mask and a safety jacket I activated the cooling-down valve, otherwise everything would have leaked out.'

22. Sentence of Criminal Chamber II of the Court of Appeal of Milan, *supra* n. 5, 18.

The production cycle for trichlorophenol had been interrupted during the stage of distillation, which had started at 3:00 a.m.; on Saturday morning after 5:00 a.m., in the proximity of the last shift, before the weekend.²³ The factory worker assigned to the area at the moment of interruption failed to cool down the reacting mass, due to the fact that this operation had not been carried out in the last three or four occasions in which the production cycle was interrupted before its conclusion, and that management had never given him instructions in this regard.²⁴ When operations were interrupted, water flow to the cooling-down circuit was usually closed.²⁵ The temperature at the moment of interruption of operations was 158°.²⁶

The emission resulting from the explosion was divided into three stages: the first, practically instantaneous, with a violent decompression and discharge of particles; the second, distillation with irregular discharge of particles; and the third and final stage characterized by a simple evaporation.²⁷ The diffusion of particles essentially took place during the first few moments and, overall, during the three stages of the accident approximately 400 kg of reaction product and reagents were released. The toxic cloud was composed of trichlorophenol, caustic soda, and 3.5% of dioxin, equivalent to 14 kg.²⁸ The discharge was carried south, south-east by the wind.²⁹ According to the weather station of Carate Brianza and Como, when the accident occurred, a wind was blowing at approximately 5 metres per second.³⁰

Afterward, it was established³¹ that the calibration of the disk (having a value of approximately 3.5 atmospheres) was not calculated for emergency purposes, but only to permit the transfer of the product from one container to another, using compressed air, as well as to safeguard the machine in the first stage of the production process.³² Icmesa failed to take into consideration the safety of its reactor, and the certainty of the managers at the Meda factory regarding the improbability of an exothermic reaction was contradicted by the accident that occurred on 10 July.³³

The managers inside the factory continued to observe the same code of silence as they had with the local authorities. Apart from Unit 'B', operations at the factory continued for another five days and management refused to give any explanations to the factory workers, adducing an 'industrial secret'³⁴ and answering that they

23. *Ibid.*, 25.

24. *Ibid.*

25. *Ibid.*, 21.

26. *Ibid.*, 19.

27. AA.VV., *Disastro Icmesa*, *supra* n. 20, 211.

28. Cf. Introduction to the Inventory of the Seveso Office Archives.

29. AA.VV., *Disastro Icmesa*, *supra* n. 20, 211.

30. *Ibid.*

31. *Final report of the Parliamentary Inquiry Committee*, *supra* n. 1, 70.

32. *Ibid.*

33. *Ibid.*, 72. 'Managers at Icmesa declared that they had not provided for a removal system due to the fact that the likelihood of an exothermic reaction was excluded from the beginning.'

34. Sentence of Criminal Chamber II of the Court of Appeal of Milan, *supra* n. 5, 19.

had 'no time to waste'.³⁵ Only on 14 July were the factory workers ordered to burn their protective suits and take a shower before leaving the factory:

When we went back to work on Monday, the gossip in the changing rooms focused on what had happened, what had not happened, they told us not to enter and by telling us not to enter we understood the opposite and therefore we entered. There was no odor, no noise, nothing differing from any other day of work. Afterwards, management instructed us to shower before going home, not to take dirty clothes home, because usually we took them home to wash, instead they asked us to leave the clothes at work because they intended washing them. And from that moment on, we became suspicious.³⁶

On 18 July, when the mayor of Meda ordered the closing of the factory as a precaution, management tried to assure the authorities, underlining the *lack* of danger in carrying out production activities.³⁷

Finally, on 23 July, following a meeting in Lugano, where the last results of tests on the contaminated area were disclosed and reports of other accidents that had previously occurred in England and in Germany were taken into consideration, the managers at Icmesa, in accordance with Dr Vaterlaus (head of the Givaudan research laboratory), submitted the following observations and suggestions to the Health Officer:³⁸

- (a) the quantities which the inhabitants of Meda and Seveso were exposed to were inferior to those characterizing intoxication cases in other accidents;
- (b) the clinical symptoms of those admitted to hospital in Niguarda and Mariano Comense correspond exactly to moderate collateral effects, comparable to clinical symptoms characterizing the aforesaid accidents;
- (c) the scheduled tests were made immediately after the accident and had identified a certain level of contamination in the proximity of area where the accident occurred. Considering the complexity behind the testing procedures, a certain lapse of time was recorded between the collection of samples and the final results;
- (d) any information regarding the development and the aftermath of similar previous accidents attest, moreover, that direct skin contact with the toxic substance may cause serious danger.³⁹

From 26 July to mid-August 1976, 676 inhabitants of Seveso and 60 inhabitants of Meda, totalling 204 families, were evacuated. With respect to the contamination level, the most contaminated area, identified as Zone 'A' was divided into seven

35. *Ibid.*

36. 'Interview of M. Gianangelo, former factory worker at Icmesa, on 18 Apr. 1999, quoted.

37. Meda Municipality Archives. File nr. 319, category 4, class 5, dossier 64.

38. Cf. in Seveso Municipality Archive. File nr. 1129, category 15, class 8, the letter written in French by the President of the Board of Directors of Icmesa, Guy Waldvogel, dated 23 July, and which arrived at the Municipality of Seveso the day after. Translation of the letter from French by M.E. Borrelli.

39. *Ibid.*

sub-areas: 'A1–A7'. The inhabitants of areas 'A6–A7', which represented 67% of the evacuated population, were authorized to return to their homes at the end of 1977. All of the buildings in areas 'A1–A5' were destroyed and more than 200 people never returned to their homes. Most of the aforesaid decided, however, to remain in Seveso, and rebuilt their homes in another area of town, also thanks to the compensation for damages awarded.⁴⁰

About 54% of the area of Seveso, 52% of Cesano Maderno, 20% of Meda, and 18% of Desio had been contaminated.⁴¹

A few days after the accident of 18 July 1976, Laura Conti, regional advisor for the Italian Communist Party (PCI), wrote:

The story of the "cloud" in Brianza is a model story. The characteristics of our traditional misgovernment, the malfunction of the institutions, customs, culture and economy are manifest. Whoever gathers eyewitness accounts, particularly difficult at this point of time, and keeps a scrupulous diary shall possess a significant cross-section of Italian society in 1976.⁴²

Up to the closure of the factory, which occurred on 18 July 1976, the authorities, and in particular the town of Meda, failed to adopt the pre-announced concrete measures against Icmesa to limit the high contamination levels caused by the factory during operations from 1947 to 1976. This sort of *public authority inertia* (the company was only sentenced to pay a penalty in 1972⁴³) is one of the causes of the accident that occurred on 10 July, the only sensational episode of a constant practice of altering the surrounding environment, adopted by the chemical factory in Meda.

The same Parliamentary Inquiry Committee that handled the 'Seveso case' censured the administrative authorities due to the fact that the latter had formally⁴⁴ interpreted its role and had only executed acts that failed to enact an adequate and substantial protection of the public interest, but only an exclusively formal fulfilment of its obligations so as to exclude any responsibility.⁴⁵

The different authorizations (planning permissions, permits for the use of toxic gas, etc.) granted to Icmesa, *apart from the problems caused by factory operations*, proved the incapacity of the public administration to combine legitimate ambition for industrial development of the company with the due safeguard of the well-being and of the environment of the towns of Meda and Seveso.

Notwithstanding the gravity of the situation, which was evident above all during the period 1948–1953 and 1971–1973, even the protests of the inhabitants lacked the necessary incisiveness and, up to the accident of 10 July 1976, failed to go beyond limited requests for intervention to local administration.

40. Cf. in <www.boscodellequerce.it>, the panel of the memory walk 'The evacuation'.

41. Cf. G. Reggiani, in *Hazard Assessment of Chemicals* (ADD CITY: Academic Press, 1983).

42. Cf. L. Conti, *Visto da Seveso. L'evento straordinario e l'ordinaria amministrazione*, 26.

43. *Final report of the Parliamentary Inquiry Committee*, *supra* n. 1, 78.

44. *Ibid.*, 101.

45. *Ibid.*

Moreover, the inhabitants near the factory, faced with the 'evident signs of danger' such as the death of farmyard animals and manifest atrophy of vegetable gardens, were essentially concerned with keeping the event to themselves and obtaining compensation for damages suffered.⁴⁶

This behaviour was typical of the social situation in that area. The area was characterized by a rural economy or by small- and medium-sized companies,⁴⁷ which required a high level of social stability and supervision,⁴⁸ corresponding almost integrally to the area involved.⁴⁹ Numerous families, homes,⁵⁰ old settlements created, notwithstanding significant immigration flows, a society that practically desired to eliminate any sort of conflictuality, where the work force, even if used in small craftsman workshops or in industries of the area, was willing to accept relations of 'confidential dependency' toward employers who actually reduced any form of control on production and related harmfulness.

A society characterized by craft workers' traditions, where individualism together with a high level of well-being acquired, thanks to personal and family values such as diligence and parsimony, made the inhabitants incapable of living a group experience.⁵¹

This incapacity to react as a group (which became general mistrust, in particular toward 'public authorities') was another aspect which, together with the inertia of the public administration, permitted Icmesa to carry out its activities in Meda without being disturbed.

Only when the release of the toxic cloud became public domain did the inhabitants of Seveso and Meda underscore once again the riskiness of Icmesa operations, even though, some days after the accident, some people interviewed by journalists stated that they were not alarmed by the odour and fumes released on 10 July 1976, because the emissions from the factory had become habitual.⁵²

Some months after the release of the toxic cloud, some stated⁵³ that even in March of the same year, a strong acrid smell coming from the factory had caused many respiratory problems,⁵⁴ but, still once more, the inhabitants had imagined that it concerned 'something chemical, something having to do with perfumes',⁵⁵ without having the real perception of what was truly produced at the Icmesa factory.⁵⁶

Moreover, the lack of clarity and contrasts that characterized the different institutions were clearly perceived by the inhabitants, who failed during the

46. Cf. *Vita con il veleno*, in 'Sapere. Seveso sei anni dopo', Bari 1982, 80.

47. Cf. *Demografia di zona inquinabile*, 'Sapere', 41.

48. *Ibid.*

49. *Ibid.*

50. Two-thirds of the homes in Seveso and Meda were owned by those who occupied them. *Ibid.*

51. Laura Conti, *Una lepre con la faccia di bambina*, Milan, 1978, 10.

52. Cf. *Sette mesi a diossinopoli*, in 'L'Espresso' dated 13 Feb. 1977.

53. Cf. *Le testimonianze di chi ha subito*, 'Sapere', 56.

54. *Ibid.*

55. *Ibid.*

56. *Ibid.*

moment of need to obtain immediate and straightforward answers from the authorities; this would have enabled the inhabitants to face the 'invisible' poison. Laura Conti declared, in her talk during the Regional Council meeting of 27 July 1976:

In emergency situations, people need clarity above all, but for some time this lacked to exist. Maybe, after having considered the provisions set out and described by the town councillor, we can state that a correct and prompt evaluation of the need to know and understand lacked.⁵⁷

Furthermore, the inhabitants of the area never had to face the need and importance of making efforts to maintain a healthier environment, because as Laura Conti said, everything focused on 'obtaining higher salaries, more automobiles, more highways and maybe – in the best of cases – more hospitals and schools, but nothing – or almost nothing –'⁵⁸ had 'been done to maintain air and water clean, as well as food products genuine'.⁵⁹

Even workers at Icmesa 'unconsciously consented' to the level of danger in factory production, because even if the technical details had been ignored by the workers, the latter could not have ignored the risky working conditions.

For what regards the production of trichlorophenol, for example, the factory workers had never been informed of the probability of producing dioxin, nor of its high toxicity,⁶⁰ even though a former worker recalls:

Many came to the factory, were employed, many remained up to midday and then failed to return. This depended on the body structure of the person, the blood temperature, because when they worked, protective gloves were always used to avoid touching acids or burning products, nevertheless hand and body eczemas appeared, breathing those odors, those fumes.⁶¹

In general, the workers did not have the necessary training and new employees worked alongside an expert factory worker for three months.⁶²

Only factory workers having a certificate to handle toxic gases, issued by the head of the provincial medical office, attended a specialized training course. This certificate, along with other qualifications, determined the payment of a fixed amount in addition to the monthly salary.⁶³

At closure, the average age of the Icmesa factory workers was approximately forty with an average seven years of seniority. The figures related to age and

57. Intervention referred to in L. Conti, *Visto da Seveso. L'evento straordinario e l'ordinaria amministrazione*, *supra* n. 42, 23.

58. L. Conti, *Visto da Seveso. L'evento straordinario e l'ordinaria amministrazione*, *supra* n. 57, 54.

59. *Ibid.*

60. *Final report of the Parliamentary Inquiry Committee*, *supra* n. 1, 61.

61. B. Erino, former Icmesa factory worker employed in 1954, interview on 10 Jun. 1999.

62. *Ibid.*, 62.

63. In 1976 the increase amounted to Italian lira 5,000 per certificate obtained. Cf. in Archive of the Bridge of Memory, the 'Certificate to handle toxic gases' of former Icmesa factory worker M. Gianangelo.