

The Salindres chemical factory (1854-1880): Off to a start in a hostile environment

Marie-Claire Loison,
Assistant professor, EMLyon Business School, OCE Research Center;
& Oussama Ouriemmi,
Associate professor, ISG International Business School, GrllsG

[French version: March 2017 - n°127]

In 1854 in Salindres, a small rural township in Gard department (France), a conflict broke out that would last 25 years. Neighbors complained about the nuisances caused by Pechiney's first factory. The phases of this environmental dispute are presented: its origin and the initial demands, its peak in litigation and then its waning. The transformation of this conflict sheds light on the strategies adopted by the parties involved and on the ideology, prevalent at the time, of industrialism. It also reveals the low level of awareness of issues characteristic of nascent industrial society.

“**B**eautiful”, “masterly” “less and less offending to the neighborhood”... this is how Dr. Roch (1880) described the chemical factory installed for the past 25 years in the administrative division of Alais (the former *arrondissement*), Gard department. The economic euphoria under the Second Empire along with Saint-Simonism had pushed the industrial revolution to the banks of the Avène in the rural *commune* (township) of Salindres. In this village of six hundred inhabitants, whose livelihood mainly depended on agricultural activities (breeding silkworms), Henry Merle (1825-1877) had in 1854 a soda factory built: the first plant in what would become the Pechiney group, a flagship of the French chemical industry during the 19th and 20th centuries.⁽¹⁾

This start-up would, however, encounter difficulties. Before plans had become concrete, a conflict arose between Henry Merle and locals who were upset by the chemical plant on the drawing board. It broke out again during the first years of the plant's operation, as the first nuisances were felt. In a rural environment preserved from industrial pollution, these nuisances were automatically blamed on the factory. Persons

living nearby appealed to the factory's directors to put an end to them or else provide financial compensation. By the mid-1860s, the conflict had heated up and led to several lawsuits. Hostility toward the factory then slackened during the 1880s. This focus on the Pechiney group's start-up years concentrates on its first plant's contentious relations with neighbors.

The sociology of law sees conflicts as social processes of change. Accordingly, the process leading to a conflict starts with what one party experiences as an offense; this “*naming*” phase turns into “*blaming*” when this party holds another responsible and then into “*claiming*” when it party makes a claim on the latter (FELSTINER *et al.* 1981). When this claim is rejected, fully or partly, explicitly or implicitly, the conflict breaks out. It is then prolonged in various forms as a function of the strategy adopted by each party. When it moves into the courtroom, new elements can be used to study it: complaints, trial records and judges' decisions (FILLION & TORNBY 2015). In line with this literature, this article studies the conflict that set the Salindres factory at odds with its neighbors during 25 years.

According to Lemieux (2007, p. 194), researchers have two options, not mutually exclusive, for studying legal conflicts. The first sees the conflict as a litmus test for

⁽¹⁾ This article has been translated from French by Noal Mellott (Omaha Beach, France).

revealing a social, historical situation, whereas the second, adopted in sociological studies on evidence and proof (BLIC & LEMIEUX 2005), focuses on the conflict's "institutive" dimension, *i.e.*, as a test for transforming the social order. The conflict in Salindres served, as will be shown, more as a litmus test for revealing the social order than as an event instituting a change in this order. Various points in this conflict are examined to highlight the strategies adopted by the parties involved, and then the ideological aspects are presented that weigh on the pursuit of these strategies. This article will also describe mentalities at the time with regard to environmental issues.

An environmental conflict breaks out...

Henry Merle's plans

Born in 1825 in Vienne, France, Henry Merle was an alumnus of École Centrale in Paris, where he took courses under Jean-Baptiste Dumas (1800-1884), a famous chemist who came from Alais. To this professor, Merle owed his orientation toward industrial chemistry and, too, the idea of building a chemical factory in Dumas' hometown (BÉJA 2008) for making soda ash from sea salt by using the Leblanc process (Figure 1). This process was, at the time, highly dangerous and polluting, and thus a cause of concern to locals in the vicinity of the plants using it. As a consequence, industrialists tended to build such factories in sparsely populated areas that were less conducive to large-scale opposition, which could hamper operations (DAUMALIN 2006, LE ROUX 2009, FRESSOZ 2013).

Between 1851 and 1854, Henry Merle acquired several lots of land in the small rural communes around Salindres and Rousson. He also drafted a paper on the area's advantages for setting up a soda factory (MERLE 1854). Among his arguments were the Alais-Bessèges railroad line, which was being laid, the mines of coal, limestone, and pyrite in the Alais basin, and the saltworks in nearby Camargue. Furthermore, a local market provided long-term outlets for the planned factory's products.

On 25 January 1855, Henry Merle & Company was formed. Following a first increase in equity on 24 August 1855 and the buyout of the Camargue saltworks, it became: Compagnie des Produits Chimiques d'Alais et de la Camargue, Henry Merle & Company (BÉJA 2008, p.52). Construction started on 3 June 1855, and the factory was finished in 1857. Meanwhile, the plant had started operating at the end of 1856 (ANGELIER 1959, p. 22), and the company's founder was undertaking the long administrative formalities for obtaining the authorization to build a soda factory in the quiet village of Salindres.

Preliminary administrative procedures

Under the decree of 15 October 1810 on classified establishments, soda factories were placed in the first category as installations that, considered the most dangerous, had to be located far from homes.

In compliance with this decree, Merle launched the procedure for obtaining the administrative authorization necessary for his factory. His request, sent to the prefect on 23 December 1853, was posted in the communes concerned.⁽²⁾ Citizens had a month to state their opposition or adherence to the plan.⁽³⁾ By 15 February, no objection had been recorded.⁽⁴⁾ Given the results of this phase of notification, the Alais Hygiene Council, in a meeting on 26 April, approved the plan⁽⁵⁾ on the grounds of a certificate from the doctor of epidemics who attested: "*The factory can have no disadvantage for public health.*"⁽⁶⁾ On 23 June 1854, the prefect thus authorized Henry Merle to carry out his plan.⁽⁷⁾

The young engineer was ready but not set to go: the authorization he had just obtained did not suffice. The mining act of 21 April 1810 required that factories of the sort planned for Salindres could be authorized only by an ordinance from the public administration.⁽⁸⁾ The previous authorization was deemed null and void.⁽⁹⁾ Since the mining act called for "*the most complete mode of information*" to the public,⁽¹⁰⁾ Merle's new request, filed on 23 December 1855, had more details about the planned activities, and was also more reassuring: "*Our manufacture will be shielded from any justified claims from neighbors. It will be noxious neither to plant life nor to public health.*"⁽¹¹⁾

This request was subjected to a new public inquiry, which lasted four months.⁽¹²⁾ This time, the plan, once made available to locals, did not leave them indifferent. The Salindres town council (CMS: *conseil municipal de Salindres*) stated its opposition to the request and called for the hydraulic services of the Ponts et Chaussées (now: Bridges, Waters and Forests) to make a report on the factory's impact on the Avène, a stream. It also demanded that all acidic gases (mostly hydrochloric acid) be condensed and that no wastewater (mostly from leaching, a process necessary for the salt and refined soda ash) be evacuated in the stream (*cf.* Figure 1).⁽¹³⁾

Other objections were also recorded. The first came from Mr. Trial, an influential town council member and the owner of the commune's only wheat mill, an establishment that, considered to be of "*utility for the commune*",⁽¹⁴⁾ was threatened by the factory.⁽¹⁵⁾ Four landowners in Rousson commune also voiced

⁽²⁾ AN.F14/4354. Certificats, 20 janvier 1854.

⁽³⁾ *Ibid.* Enquête, 5 janvier 1854.

⁽⁴⁾ *Ibid.* PV de l'enquête, 15 février 1854.

⁽⁵⁾ *Ibid.* Avis du Conseil d'hygiène, 26 avril 1854.

⁽⁶⁾ *Ibid.* Certificat médical, 24 décembre 1853.

⁽⁷⁾ *Ibid.* Arrêté du préfet, 23 juin 1854.

⁽⁸⁾ Décret pris après consultation du Conseil d'État.

⁽⁹⁾ AN.F14/4354. Rapport des Mines, 11 juin 1857, p. 1

⁽¹⁰⁾ *Ibid.* Rapport des Mines, 24 octobre 1857, p. 10.

⁽¹¹⁾ *Ibid.* Demande de Merle, 23 décembre 1855, p. 2.

⁽¹²⁾ *Ibid.* Certificats d'affiches et de publications.

⁽¹³⁾ *Ibid.* Oppositions du CMS, 29 juillet 1856; Délibérations du CMS, 13 mai 1856.

⁽¹⁴⁾ *Ibid.* Délibérations du CMS, 13 mai 1856, p. 4.

⁽¹⁵⁾ *Ibid.* Opposition, 16 juillet 1856, p. 1.

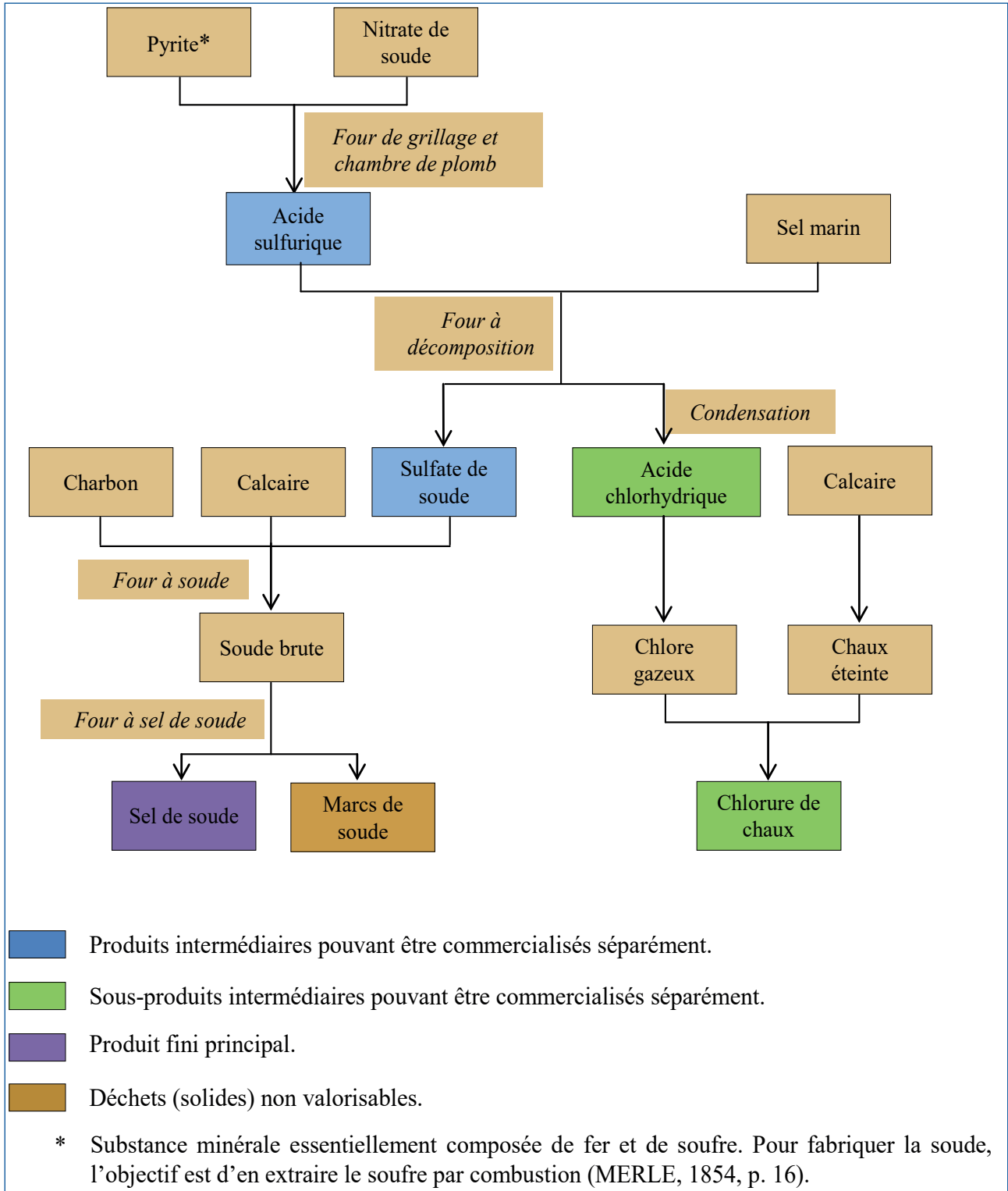


Figure 1: The Leblanc process for making soda ash

their disagreement by arguing that the factory would have a result “disastrous both for animal and plant life” regardless of the precautions taken by its managers.⁽¹⁶⁾

The first official reaction to these objections came from the subprefect, who considered that all of them “can be summarized by an exaggerated, premature

fear of eventual torts”.⁽¹⁷⁾ The report that the Ponts et Chaussées made at the town council’s demand did not provide any clear response to the objections related to the flow of the Avène. The impact on the stream was hard to foresee. The factory’s “did not plan on directly tapping water from the stream”, since water was to be drawn from a well located at 50 meters from the

⁽¹⁶⁾ *Ibid.* Oppositions, 24 juillet 1856, p. 1.

⁽¹⁷⁾ *Ibid.* Rapport du sous-préfet, 5 août 1856, p. 2.

stream. Under these conditions, there was “*for the time being no administrative regulation to impose on Merle with regard to the Avène water system*”.⁽¹⁸⁾

The Mining Service was also asked for an inquiry into the admissibility of the objections that had been raised. According to it, the town council’s demand for all gases to be condensed was “*absurd*” since condensation was “*impossible*” to accomplish. Its report described the “*minutely detailed processes whereby Mr. Merle has gone as far as possible with condensation*” and noted that “*the smoke stacks are high enough for the gases to be released in the atmosphere*”. Furthermore, no wastewater would be released in the Avène.⁽¹⁹⁾ Mr. Trial’s objection seemed ungrounded since “*the commune will gain by the factory’s establishment much more than what it would lose from the mill’s complete shutdown*”. The other objections were handled in like manner.⁽²⁰⁾ The report concluded that Henry Merle should be granted the requested authorization.

Following this report, the prefect issued on 23 September 1857 a formal opinion in favor of the planned factory. This was an essential step toward obtaining approval by the minister and an imperial decree. The prefect’s opinion relied on engineers’ reports about Merle’s pledges with regard to the harm that could allegedly ensue from his plans. It noted, too, the *fait accompli* since the factory was “*already built and operating provisionally*”.⁽²¹⁾ A draft of the decree, prepared by the Conseil Général des Mines, was approved by the Conseil d’État and issued on 15 July 1858. It definitively authorized Merle to operate a chemical factory on lots in the communes of Rousson and Salindres in spite of the opposition of several persons who lived nearby.⁽²²⁾ This authorization set conditions for operating the factory: acidic waters had to be collected in tanks; saline waters had to be poured into trenches to be neutralized; gases had to be emitted through smoke stacks or else, for acidic gases, undergo full condensation. Furthermore, the release of any wastewater or any detritus (baked pyrite and soda byproducts) in the Avène was forbidden.⁽²³⁾

An environmental conflict in three phases

The first claims

From the start of operations at the factory, the nuisances experienced by people living nearby became the subject of claims that were addressed directly to Henry Merle. Most of their claims came from homeowners and from farmers, who were directly affected by damages to crops and livestock. For example, autopsies by “*state-of-the-art people*”⁽²⁴⁾ demonstrated that “*repeatedly drinking*

water from the Avène led to the wasting, languishing and death of livestock”.⁽²⁵⁾ During the first years of the factory’s operation, the release of acidified water and detritus in the stream had, it was discovered, not been prevented, contrary to the stipulations of the decree of 15 July 1858.⁽²⁶⁾ As a consequence, Merle accepted an out-of-court arrangement for paying compensation “*despite the absence of tangible evidence*”.⁽²⁷⁾ Till the mid-1860s, only one case of compensation (involving a ram’s death) was decided by a court.⁽²⁸⁾ Given the increasing number of claims fostered by these private settlements, Merle pursued, in parallel, a strategy of systematically purchasing lots around the factory, his goal being to put potential claimants at a distance (ANGELIER 1959, p. 103).

When claims sent directly to the factory produced no effect, residents, usually through a group petition, turned to the minister or prefect.⁽²⁹⁾ The factory was then, in some cases, forced to submit to new administrative measures. By a decision of 13 August 1864 for instance, the prefect required storage of the salt and acidified waters in independent, leakproof tanks large enough for evacuation only when the Avène was high.⁽³⁰⁾ The measure was adopted preventively to “*reassure nearby residents*”.⁽³¹⁾ Consulted for this decision, the Mining Service⁽³²⁾ confirmed that the conditions imposed on the factory at Salindres were legally satisfied⁽³³⁾ and that the factory “*did not exercise on the locality the unfortunate influence that the petitioners would like to attribute to it*”.⁽³⁴⁾

The peak of complaints

Owing to the factory’s activities, along with the policy of quasi systematic compensation without going to court, more and more neighbors sent claims to the director for financial compensation. In Merle’s opinion, their claims and the compensation granted were mostly without justification or “*out of proportion with the actual damage*”.⁽³⁵⁾ In the mid-1860s, he started holding his ground; and complaints would soon be filed in court: 287 actions for damages were brought against the factory in Salindres between 1865 and 1872.⁽³⁶⁾

Each complaint entailed appointing experts (mostly doctors, pharmacists and local chemists) whose principal duty was “*to say and report, after verification of the places in litigation, whether the emanations, smoke, vapor and infiltrations or evacuations of water or of any other substances coming from the Salindres factory*

⁽¹⁸⁾ *Ibid.* Rapport du service hydraulique, 21 février 1857, p. 2-3.

⁽¹⁹⁾ *Ibid.* Rapport des Mines, 11 juin 1857, p. 10.

⁽²⁰⁾ *Ibid.* p. 10-11.

⁽²¹⁾ AN.F14/4354. Avis du préfet, 23 septembre 1857, p. 3.

⁽²²⁾ AG.5M424. Décret, 15 juillet 1858.

⁽²³⁾ *Ibid.* pp. 2-3.

⁽²⁴⁾ AG.5M424. Pétition à Merle, 24 août 1862, p. 2.

⁽²⁵⁾ *Ibid.* au préfet, 3 décembre 1863, p. 2.

⁽²⁶⁾ *Ibid.* Rapport des Mines, 20 avril 1864, p. 11.

⁽²⁷⁾ *Ibid.* pp. 12-13.

⁽²⁸⁾ *Ibid.*

⁽²⁹⁾ AG.5M424. Pétition au préfet, 3 décembre 1863.

⁽³⁰⁾ *Ibid.* Rapport des Mines, 20 avril 1864, p. 9.

⁽³¹⁾ *Ibid.* Arrêté préfectoral, 13 août 1864, p. 2.

⁽³²⁾ *Ibid.* Rapport des Mines, 20 et 22 avril 1864.

⁽³³⁾ *Ibid.* Rapport des Mines, 20 avril 1864, pp. 10-11.

⁽³⁴⁾ *Ibid.* Arrêté préfectoral, 13 août 1864, pp. 1-2.

⁽³⁵⁾ *Ibid.* Lettre de Merle, 6 mai 1876, p. 2.

⁽³⁶⁾ *Ibid.* Rapports d’experts, 1872, pp. 47-55.

have been harmful to the claimants' property of any sort". In case of harm to "harvests, products, houses, homes and families", the experts were to estimate the amount of the observed damage.⁽³⁷⁾ After this expertise, the lower civil court in Alais ruled on the actions for damages.

Out of all court decisions during the period under study, those of 4 January 1876⁽³⁸⁾ regarding 135 lawsuits are especially significant of the turn that this conflict was taking. The remarks hereafter concentrate on these decisions and the eleven reports made by the experts appointed for these lawsuits (cf. Table 1).

In all these reports, the experts considered that their task was not to demonstrate whether or not nuisances resulted from the factory's activities but, instead, to determine the extent of the damages recognized by all parties. Their major difficulty was to determine the exact origin of the observed damage, which was to be blamed on causes either directly linked to the factory or else unrelated to the factory (parasitism, illnesses, poor cultivation practices, inadequate maintenance of buildings, the geology of the soil, atmosphere, etc.). All experts recognized the need to compensate plaintiffs when the proven damage did not come from causes unrelated to the factory and/or had not been exaggerated. However their reports often reached divergent conclusions about both the extent of damages (geographical location and distance from the factory) and the amount of compensation to be awarded.

When examining experts' reports, we noticed two major groups (cf. Table 1). Experts in the first group considered that it was "undeniable that the Salindres

factory causes damages to the properties surrounding it"⁽³⁹⁾ and declared that they had observed damages within a radius of approximately four kilometers around the establishment.⁽⁴⁰⁾ According to Henry Merle, they granted, as a consequence, "punitive damages to any plaintiff regardless of his location or distance" to such an extent that "the factory's existence risked being seriously jeopardized".⁽⁴¹⁾ On the contrary, the second group concluded that the degree of nuisance and insalubrity from the factory was low. However they admitted that discharges could, accidentally and exceptionally but very seldom, cause damages — but only within a radius of a few hundred meters. According to them, only these occasional cases legitimately deserved compensation.

The first report from this second group of experts (specifically Pagès & Béchamp in 1872)⁽⁴²⁾ marked a turning point in lawsuits against the Salindres factory. For one thing, this report signaled an end to the compensation that Merle had, till then, paid under out-of-court settlements.⁽⁴³⁾ For another, it would serve as the reference used by the court in Alais for its opinions on 4 January 1876.⁽⁴⁴⁾ Out of the eleven reports on record (cf. Table 1), those that converged on the findings in the report from Pagès & Béchamp were all accepted by the court whereas the others (by the first group of experts) were systematically set aside. According to the court, the conclusions formulated by the first group were "not sufficiently borne out by the

⁽³⁷⁾ *Ibid.* Rapport de Reynès, Ricourt et Boyer, 1874, pp. 1-2.

⁽³⁸⁾ *Ibid.* Jugements, 4 janvier 1876.

⁽³⁹⁾ *Ibid.* Rapport de Roux, Pagès et Béchamp, 1872, pp. 84-85.

⁽⁴⁰⁾ *Ibid.* Rapport de Boyer, Comte et Foucard, 1872, p. 18.

⁽⁴¹⁾ *Ibid.* Lettre de Merle, 6 mai 1876, p. 2.

⁽⁴²⁾ *Ibid.* Rapport de Roux, Pagès et Béchamp, 1872, pp. 6-84.

⁽⁴³⁾ *Ibid.* Jugements, 4 janvier 1876, pp. 8-9.

⁽⁴⁴⁾ *Ibid.* Jugements, 4 janvier 1876.

Table 1:
Conclusions from reports by experts

Reports	Year	First group: Permanent and extensive damages	Second group: Accidental and not very extensive damages
<i>Boyer, Comte & Foucard</i>	1872	All	None
<i>Roux, Pagès & Béchamp</i>	1872	Roux	Pagès & Béchamp
<i>Boyer, Foucard & Boissin</i>	1872	All	None
<i>Martins, Ricourt & Boyer</i>	1874	Boyer	Martins & Ricourt
<i>Reynès, Ricourt & Boyer</i>	1874	Boyer	Reynès & Ricourt
<i>Lortet, Lacharme & Mazeran</i>	1875	None	All
<i>Lortet, Foucard & Béchamp</i>	1875	Foucard	Lortet & Béchamp
<i>Chancel, Lortet & Foucard</i>	1875	Foucard	Chancel & Lortet
<i>Félix, Lortet & Béchamp</i>	1875	Félix	Lortet & Béchamp
<i>Lortet, Félix & Foucard</i>	1875	Félix & Foucard	Lortet
<i>Gamel, Comte & Foucard</i>	1875	All	None

Source: AG.5M424. Rapports d'experts, 1872-1875.

observations, findings and experiences on which they are based". Their investigation was not "of a sort that could establish positively and certainly their opinion".⁽⁴⁵⁾ That being the case, the court dismissed most of the suits for damages (cf. Table 2). Out of the 135 suits judged, 116 were considered inadmissible, unfair and/or without solid grounds. For the 19 others, the factory was found liable and had to pay compensation amounting to 1,856.60 francs. The court ordered, in addition, the plaintiffs whose complaints had been fully or partially dismissed liable for the payment of all or part of the fees related to proceedings. In some cases, part of these costs were left to the factory.

After this decision and in order to protect his business from future complaints, Merle made an attractive offer for buying all the properties located within a radius that was noticeably longer than the one retained by the second group of experts. Most property owners who had not been party to the litigation accepted this offer, while all the plaintiffs refused.⁽⁴⁶⁾ The dispute between the Salindres factory and its neighbors apparently had not yet reached an end.

A lull

The plaintiffs whose suits had been dismissed by the court turned to the minister on 26 March 1876 to ask that an inquiry be opened to recognize that their claims were fair and well-founded.⁽⁴⁷⁾ The administration replied that it was not to intervene in lawsuits for punitive damages, since they were the competence of the judiciary. From the viewpoint of the general

interest however, its duty was to make sure that the factory in Salindres was operating in compliance with the conditions laid down in the authorization.⁽⁴⁸⁾ The engineer from the Mining Service in charge of examining this question confirmed the conclusions formulated in the various reports made by the experts in the second group.⁽⁴⁹⁾ He remarked, however, that the factory's current premises were much bigger than the limits set in the initial authorization. There were, therefore, grounds for enjoining Merle Compagnie to "request the authorization to maintain its factory in operation on its current premises". Furthermore, "this authorization has to be requested and examined like an authorization for a new creation of an unsalutary, incommode and dangerous establishment of the first category."⁽⁵⁰⁾

Henry Merle abruptly died on 10 July 1877. His closest colleague, Alfred Rangod AKA Pechiney (1833-1916), became general manager of what would now bear the name: Compagnie des Produits Chimiques d'Alais et de la Camargue, A.R. Pechiney et Compagnie. On 21 December 1878, he filed the "request for the authorization to maintain the factory in operation on its current premises".⁽⁵¹⁾

The Alais Hygiene Council examined this new request. Its proceedings relied on the registries opened from 2 May till 2 June 1879 in the ten communes within a 5-km radius around the factory in Salindres.⁽⁵²⁾ However the council mainly based its opinion on the report made by Dr. Roch in the name of the committee of experts

⁽⁴⁵⁾ *Ibid.* pp. 5-6.

⁽⁴⁶⁾ *Ibid.* Lettre de Merle, 6 mai 1876, p. 3.

⁽⁴⁷⁾ *Ibid.* Pétition au ministre, 26 mars 1876, pp. 1-3.

⁽⁴⁸⁾ *Ibid.* Lettre du ministre, 10 juin 1876, p. 2.

⁽⁴⁹⁾ *Ibid.* Rapport des Mines, 31 août 1876, p. 15.

⁽⁵⁰⁾ *Ibid.* p. 18.

⁽⁵¹⁾ AG.5M424. Affiche de l'arrêté préfectoral du 26 avril 1879.

⁽⁵²⁾ *Ibid.*

Table 2:
Court decisions of 4 January 1876

Experts (year of report)	Number of plaintiffs	Complaints dismissed	Awarded damages	Damages (francs)	Fees (francs)
<i>Boyer, Comte & Foucard (1872)</i>	52	41	11	1477,60	7398,60
<i>Roux, Pagès & Béchamp (1872)</i>	17	15	2	105,00	7311,10
<i>Boyer, Foucard & Boissin (1872)</i>	7	5	2	124,00	5821,40
<i>Martins, Ricourt & Boyer (1874)</i>	7	6	1	50,00	4310,70
<i>Reynès, Ricourt & Boyer (1874)</i>	9	8	1	60,00	5746,20
<i>Lortet, Lacharme & Mazeran (1875)</i>	17	16	1	15,00	5045,00
<i>Lortet, Foucard & Béchamp (1875)</i>	8	8	0	0	5237,15
<i>Chancel, Lortet & Foucard (1875)</i>	5	5	0	0	4330,05
<i>Félix, Lortet & Béchamp (1875)</i>	6	5	1	25,00	5099,85
<i>Lortet, Félix & Foucard (1875)</i>	6	6	0	0	4184,75
<i>Gamel, Comte & Foucard (1875)</i>	1	1	0	0	1074,30
Total	135	116	19	1856.60	55,559.10

Source: AG.5M424. Rapports d'experts, 1872-1875; Jugements, 4 janvier 1876.

that the council had commissioned (ROCH 1880). After an inquiry lasting several months, this committee clearly stated that the factory should keep operating; but, like previous experts, it recognized the existence of nuisances. Two main arguments underlaid this opinion: on the one hand, the effects of the observed discharges were minimal in comparison with the claims made by plaintiffs; and, on the other hand, they were more exceptional and accidental than permanent and deliberate. Considering that the committee's report was a conscientious, in-depth study, the Hygiene Council unanimously adopted its conclusions and approved the request for the authorization formulated by Pechiney.⁽⁵³⁾ An ordinance issued by the prefecture confirmed this opinion on 6 February 1880.⁽⁵⁴⁾

Dr. Roch's report and the ensuing administrative decision were decisive in the history of the Salindres soda factory. They redefined the grounds for environmental litigation and put an end to lawsuits and joint actions by plaintiffs. Afterwards, the damages observed were usually set down to accidental causes; the number of claims fell off, and most of them were settled out of court (BÉJA 2008, p.144).

The environmental conflict in Salindres: Revealing or testing the social order?

Between disclosure and containment

At its origin, opposition to the Salindres factory arose during the public administration's inquiry, when local residents voiced their disagreement with plans for the factory and tried to block them. The conflict, which sprang from the failure of this first round of opposition, would flare up again when the first nuisances were experienced. Landowners and farmers addressed their claims for financial compensation directly to the factory's director. Relations between the two parties became public only after Henry Merle stood pat and refused out-of-court settlements. The conflict then moved into civil court, as plaintiffs sued to obtain compensation. Administrative authorities were also contacted for imposing more stringent conditions on the factory.

Although damages were experienced individually, opposition to the factory sometimes took a collective turn: petitions. Instead of expressing a cause pursued in common, these collective actions amounted to an accumulation of individual cases motivated by private, short-term interests: damage to the harvest, to animals or houses, loss of property value, etc. The arguments in the petitions clearly pursued a single goal: obtain compensation, case by case, for damages. This finding falls in line with the analysis of Felstiner *et al.* (1981, p. 648, note 13): "*Even class actions are often*

merely collections of individual disputes, aggregated for reasons of convenience and efficiency, rather than a form of collective action aimed at achieving a group objective." In Salindres, this absence of a common cause did not just come from the plaintiffs. It also stemmed from the factory's strategies for containing the conflict, which helped splinter collective actions, as when the staff managed to convince plaintiffs to abandon suing and settle out of court.⁽⁵⁵⁾

Contrary to the strategy adopted by locals for publicizing cases, the factory's directors preferred a strategy of containment. For instance, their main response to claims from people living near the factory was to voluntarily propose financial compensation. The major goal of these one-on-one agreements was to "*be free of the worries and fees entailed by a lawsuit*".⁽⁵⁶⁾ Throughout the conflict, the purchases of lots enabled, in parallel, management to gradually create around the soda factory a "*no man's land of protection against complaints from persons nearby*" (ANGELIER 1959, p. 103).

Financial payments were the most visible part of the factory's broader policy for exercising social control over its local environment and thus weakening or even inhibiting opposition (FREZZOZ 2013). For example, company executives and staff-members held political and even judicial offices. Merle, Reboul and Pechiney successively served as mayor of Salindres. Reboul also became justice of the peace in Saint-Privat-des-Vieux (ANGELIER 1959, pp. 44-45). The factory in Salindres provided, it is noteworthy, many opportunities to local firms and, over time, became the region's leading employer — this tipped the balance in its favor. Its development altered the layout of the village of Salindres. The local population was eventually made up of persons whose income mostly depended, directly or indirectly, on the factory and who were, therefore, not very likely to oppose a business that sustained their livelihood.

Owing to its paternalistic practices (housing, church, supply of drinking water, stores, medical and pharmaceutical services, schools, scholarships, emergency funds, etc.), the factory swayed the rural society, as living conditions and mentalities evolved. Practices of this sort were, it should be pointed out, frequent in geographically isolated plants in rural areas. The intent was to see to the living conditions of workers and their families, and thus attract, stabilize and control the blue-collar workforce needed for factories (DAUMALIN 2005, LOISON 2009). In these conditions, as Angelier (1959, pp. 44-45) has emphasized, the inhabitants' freedom of action, if not also of thought, was restricted. In 1880, when hostility slackened, Salindres was no longer the same commune as the one that had seen the soda factory being built in 1854.

⁽⁵³⁾ AG.5M424. Délibérations du Conseil d'hygiène, 28 août 1879, p. 32.

⁽⁵⁴⁾ *Ibid.* Rapport de Félix, 15 mars 1902, p. 5.

⁽⁵⁵⁾ *Ibid.* Rapport de Roux, Pagès et Béchamp, 1872, pp. 67-68.

⁽⁵⁶⁾ *Ibid.* Lettre de Merle, 6 mai 1876, p. 2.

The dominance of industrialism

The decree of 1810, supportive of industrialists' interests

The decree of 15 October 1810 on classified establishments is a founding text on the relations between the environment and firms in France. It put an end to the form of regulation under the monarchy, which was thought to have hindered the development of industrial capitalism. Its principal commentators have emphasized that the spirit of industrialism presided over the drafting of this decree as well as the jurisprudence ensuant from it (CORBIN 1983, MASSARD-GUILBAUD 1999, LE ROUX 2009 & 2011, FRESSOZ 2013). While providing for protecting citizens against the nuisances of industry, the decree mainly sought to boost industrialization, as in the case of the chemical industry.

This decree was adopted in response to the discontent of persons living near factories; and its major purpose was to prevent litigation with residents. The decree provided for classifying establishments in three categories as a function of their noxiousness, which necessitated locating them farther from residential zones. The establishments covered by the decree had to obtain, before startup, an administrative authorization. The request for this authorization in the case of an establishment in the first or second category consisted of an inquiry to examine the conveniences and inconveniences (*commodo and incommodo*) in all communes within a 5-km radius. Instead of forcing industries to reduce pollution, the 1810 decree required that they be located far from homes but without starting the required distance. It thus seemed to offer a solution to local discontent.

Above all, the 1810 decree was a response to economic and industrial issues, in particular the protection of a thriving chemical industry (FRESSOZ 2013). Given that the decree was not retroactive, its scope was narrow; and the *status quo* of the factories that already existed was confirmed (CORBIN 1983, DAUMALIN 2006). Furthermore, the application of the decree was very favorable to industrialists (FRESSOZ 2013, LE ROUX 2011). For one thing, public authorities usually disregarded the objections expressed by locals during the public inquiry. For another, once the administrative authorization was granted, it was nearly impossible for locals to impede the establishment's expansion or to halt the nuisances generated by it. Furthermore, no control was foreseen after the authorization, nor any administrative or penal sanction in case of irregularities (MASSARD-GUILBAUD 1999). The decree had a very limited power of enforcement.

A twofold form of regulation, administrative and judicial

In the 19th century, two complementary procedures were of avail for regulating industrial nuisances: the administrative authorization during a first phase, and then recourse to a civil court when differences were not settled through an intervention by public administration or the negotiation of a deal. The rationales underlying these procedures were fully complementary: the *a priori* authorization of establishments as part of a national

industrialization program; and an *a posteriori* appraisal of damages in line with administrative decisions. Applying this liberal system ultimately led to recognizing financial compensation for damages as a universal principle and as the ultimate solution for environmental disputes during the 19th century (FRESSOZ 2013).

In Salindres, these complementary procedures successively came into play as a function of the changing strategies of plaintiffs and of the factory. Despite some fits and starts, the overall trend in this conflict fell in line with the rationale of industrialization dominant in public policies for managing industrial nuisances. The factory systematically obtained the authorizations needed despite the objections raised by local residents; and the courts ratified administrative decisions in return for the payment of limited punitive damages.

A form of regulation dominated by science and technology

This twofold regulation, administrative and judicial, of industrial nuisances relied heavily on scientific expertise, both during the first phase when (prior to the complaints filed by residents) experts were asked for an official opinion about the request for an authorization filed by an industrialist and then later on when the public administration or court asked experts to assess the validity of complaints and appraise the damages. The decisive influence of expertise during the conflict that set the Salindres factory at odds with residents is evidence of the omnipresence of science and technology in environmental regulations during the 19th century (LE ROUX 2011, LE ROUX & LETTÉ 2013). Throughout this conflict, experts closely examined manufacturing processes as well as the plaintiffs' properties and agricultural practices. Their conclusions soundly backed the factory during both administrative formalities and lawsuits. Administrative authorities systematically followed the opinions from the Mining Service, Ponts et Chaussées or Hygiene Council. Reports from experts also served as the grounds for the decisive judicial opinions formulated in 1876; and they played a part, a few years later, in the lull. They set the conditions and limits of future environmental lawsuits.

Two major remarks can be made by drawing on statements from the scientific reports used for administrative inquiries or in court. First of all, the general position adopted in favor of the growth of the chemical industry fully fitted in with the rationale of industrialization defended by central authorities and the state administration. Secondly, the experts were relatively optimistic about the risks stemming from an industry where the progress later made would provide sure evidence of its ability to reduce nuisances. The reports that the experts made to administrative and judicial authorities were intended to reassure the local population. All of them evinced a high level of toleration for the factory and pointed out its success in an economic and technical sense. These reports emphasized, in particular, the many improvements made in manufacturing processes and their positive effects on reducing discharges. Furthermore, most of them considered that industrial nuisances were a low

price to pay when compared with the Salindres factory as a source of economic prosperity (jobs, sales, rentals, higher real estate prices, etc.) and social progress (ROCH 1880).

A local conflict with a narrow scope

A limited radius

For more than 25 years, the movement of opposition that agitated the rural community of Salindres did not reach beyond a few kilometers around the factory, even though this environmental conflict was not an isolated instance in France. An examination of the local and regional press (*Courrier des Cévennes*, *L'Écho d'Alais*, etc.) shows that opposition to the factory did not resound in the media. Even locally, only the persons directly affected by the factory in their economic livelihood were parties to the conflict. According to an analysis of the antecedents to litigation (FELSTINER *et al.* 1981), the other locals, including workers at the factory, either did not perceive the nuisance (even though the plant had effects, potential or proven, on their living conditions) or else, if they did perceive it, decided not to make a claim or file a complaint (because they depended economically on the factory).

Given this inability to stimulate collective mobilization, the conflict was contained within a very short radius. The principal parties were only, on the one side, a single, big factory that dominated the region and, on the other side, landowners and farmers around the plant. In big cities, such as Marseille, the situation was different, since movements of opposition sometimes managed to create a balance of power that forced soda factories to change their practices (DAUMALIN 2006).

An absence of environmental awareness

Apart from the limited radius of this conflict, the Salindres affair shows that, till the end of the 19th century, there was not yet any global awareness of industrial nuisances. These nuisances, restricted to nearby pollution, did not include more diffuse forms of pollution. Damage to the natural environment (soil, water, air or landscape) was, in general, overlooked. Environmental conflicts were seen in purely individualistic terms and as a matter of interests.

This partial perception of pollution was a constant in environmental conflicts during the 19th century. The permanent deterioration of the areas around factories was never mentioned during conflicts. The principal reason these other forms of pollution (most of which are invisible) were overlooked is that the various parties to the conflict were not aware of them. In fact, such forms of pollution would not crop up in debates and discussions about protecting the environment till the end of the 1950s (DAUMALIN 2006, LOISON 2009).

Conclusion

The long conflict that set the soda factory in Salindres and its neighboring residents at odds started in 1854 (when Henry Merle had the factory built) and did not calm down till 1880. The article has drawn attention to the successive phases (FELSTINER *et*

al. 1981) of this conflict, or, to borrow the terms used by Lemieux (2007), the “configurations” that change as a function of the strategies pursued by the parties to the conflict. This process of conflict started before the first stone had been laid to build the factory. The inquiry, under the edict of 1810, into the conveniences and inconveniences of such an establishment gave to people living near the factory the possibility of publically voicing their objections; it thus provided the first evidence of the coming environmental conflict. During the first years of the factory’s operation, out-of-court settlements restricted the conflict to a transaction between two parties. By the mid-1860s, given the increasing number of claims, the factory’s management refused further transactions, and the conflict moved into court. In the last phase of this process, owing not only to a convergence between court orders, experts’ opinions and administrative inquiries, but also to the factory’s importance (after 25 years of operation) in the local community, the conflict lulled; and forms of opposition were redefined.

These transformations, or reconfigurations, reveal: the strategies of the parties involved, the dominant ideology, and the mentalities characteristic of the period. The Salindres affair sheds light on the alternation between disclosure and containment in strategies of conflict management (LEMIEUX 2007) and on the liberal ideology of industrialization, dominant during the conflict and its evolution. Beyond the interests of the parties concerned, this affair also reveals the low environmental awareness at the advent of industrial society.

The utilitarian motivations and strategies of the various parties as well as the narrowly localized aspect of this conflict account for its inability to challenge social norms and mentalities. On the contrary, they reveal how the twofold regulation, administrative and judicial, of environmental questions in alliance with science and technology would gradually lead to locals accepting the factory (CORBIN 1993) and to naturalizing or normalizing the resulting nuisances (LE ROUX & LETTÉ 2013). Under these conditions, rather than testing society and leading to its transformation by instituting new values (LEMIEUX 2007), the Salindres affair was a litmus test of the social and historical situation at the time.

Sources and references

Primary Sources

Archives nationales (AN): F14/4354. Ministère des Travaux publics. Dossiers d’usines métallurgiques. Gard. Dossier 15. Fabrique de produits chimiques d’Henry Merle à Rousson et Salindres. Plans. 1856-1858.

Archives départementales du Gard (AG): 5M424. Administration générale du département. Santé publique et hygiène. Établissements classés dangereux, insalubres et incommodes. Dossier par commune. Salindres. Usine de produits chimiques (Forges et Camargue). 1859-1879.

BÉJAM., *Recueil de documents concernant l'histoire de l'usine de Salindres*, (Salindres: AREHIS) 2008 [1939].

MERLE H., *Mémoire explicatif*, 1854.

ROCH A., *Rapport au Conseil d'hygiène de l'arrondissement d'Alais* (Alais: Imprimerie A. Brugueirolle et Compagnie), 1880.

References

ANGELIER C., *L'Usine de Salindres*, dissertation (geography), Faculté des Lettres et Sciences Humaines de Montpellier, 1959.

BLIC de D. & LEMIEUX C., "Le Scandale comme épreuve. Éléments de sociologie pragmatique", *Politix*, 18(71), pp. 9-38, 2005.

CORBINA., "L'Opinion et la politique face aux nuisances industrielles dans la ville pré-haussmannienne", *Histoire, économie et société*, 2(1), pp. 111-118, 1983.

DAUMALIN X., "Patronage et paternalisme industriels en Provence au XIX^e siècle. Nouvelles perspectives", *Provence historique*, 55(220), pp. 123-144, 2005.

DAUMALIN X., "Industrie et environnement en Provence sous l'Empire et la Restauration", *Rives nord-méditerranéennes*, 23, pp. 27-46, 2006.

FELSTINER W.L.F., ABEL R.L. & SARAT A., "The emergence and transformation of disputes: Naming, blaming, claiming", *Law and Society Review*, 15(3/4), pp. 631-654, 1981.

FILLION E. & TORNAY D., "De la réparation individuelle à l'élaboration d'une cause collective", *Revue française de science politique*, 65(4), pp. 583-607, 2015.

FRESSOZ J.B., "Payer pour polluer", *Histoire & mesure*, 28(1), pp. 145-186, 2013.

LE ROUX T., "La Mise à distance de l'insalubrité et du risque industriel en ville. Le décret de 1810 mis en perspectives (1760-1840)", *Histoire & Mesure*, 24(2), pp. 31-70, 2009.

LE ROUX T., "La Première jurisprudence du décret de 1810, une régulation à l'orientation industrialiste (1810-1830)", *Annales des Mines - Responsabilité et environnement*, 2(62), pp. 11-15, April 2011.

LE ROUX T. & LETTÉ M., "Conflits et régulations environnementales" in T. LE ROUX & M. LETTÉ (eds.), *Débordements industriels – Environnement, territoire et conflit XVIII^e-XXI^e siècles* (Rennes: Presses Universitaires de Rennes), pp. 13-35, 2013.

LEMIEUX C., "À quoi sert l'analyse des controverses?", *Mil neuf cent*, 1(25), pp. 191-212, 2007.

LOISON M.C., *Contribution à l'histoire de la responsabilité sociale de l'entreprise. Du paternalisme au développement durable. Le cas du groupe Pechiney (1855-2003)*, dissertation in managerial sciences, Paris Dauphine University, 2009.

MASSARD-GUILBAUD G., "La Régulation des nuisances industrielles urbaines (1800-1940)", *Vingtième Siècle, revue d'histoire*, 64, pp. 53-65, October-December, 1999.