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La CEDU si pronuncia sul caso della "Terra dei fuochi"
(CEDU, sez. I, sent. 30 gennaio 2025, ric. n. 51567/14 e altri)

La questione esaminata dalla Corte si è incentrata sul decennale fenomeno di inquinamento causato da sversamenti abusivi, interramenti e/o abbandoni incontrollati di rifiuti pericolosi, speciali e urbani, spesso effettuati da gruppi criminali organizzati, in alcune zone della regione Campania ("*Terra dei Fuochi*"). In particolare, la causa è stata valutata con riferimento, tra gli altri parametri, all'art. 2 della Convenzione Edu, in riferimento al quale la Corte ha ricordato in prima istanza che esso statuisce un obbligo positivo per gli Stati di adottare tutte le misure appropriate per salvaguardare la vita delle persone sottoposte alla loro giurisdizione nel contesto di qualsiasi attività pubblica o privata, compresa la gestione di siti di raccolta dei rifiuti, che possa comportare un rischio reale e imminente per la vita di un individuo. Più esattamente, la Corte ribadisce che tale obbligo positivo comporta, in primo luogo, un dovere primario dello Stato di predisporre un quadro legislativo e amministrativo concepito per fornire un'efficace deterrenza contro le minacce al diritto alla vita, riservandosi alla discrezionalità degli Stati la scelta delle misure ritenute più adeguate a tutelare la vita dei cittadini.
Facendo applicazione di tali principi generali al caso di specie, la Corte si sofferma anzitutto sul tipo di inquinamento praticato nella Terra dei fuochi, osservando come lo scarico illegale, spesso accompagnato da incenerimento, e l'interramento di rifiuti siano attività intrinsecamente pericolose che comportano un rischio per la vita umana "sufficientemente grave, reale e accertabile" a causa del rilascio nell'ambiente di sostanze altamente tossiche come diossine e metalli pesanti.
Pertanto, accertata l'applicabilità dell'art. 2 alla causa in oggetto, la Corte ha incentrato la sua valutazione sul ruolo assunto dalle autorità nazionali rilevando un notevole ritardo nell'adozione di misure concrete atte a contrastare il fenomeno di inquinamento di cui pure erano a conoscenza già da diverso tempo, mancando quindi di assolvere all'obbligo statuito nel parametro convenzionale evocato; emergono in particolare *i)* la mancanza di una risposta sistematica, completa e coordinata nell'individuazione delle aree interessate dal fenomeno di inquinamento per accertare la natura e l'estensione della contaminazione; *ii)* un notevole ritardo nell'attuazione delle azioni di decontaminazione delle aree interessate; *iii)* il mancato compimento di indagini adeguate per valutare l'impatto sulla salute di tale fenomeno di inquinamento; *iiii)* l'inadeguatezza delle misure adottate per contrastare lo scarico illegale, l'interramento e l'incenerimento dei rifiuti; *iiiii)* un ingiustificabile ritardo nell'adozione di misure che consentissero di affrontare le carenze che affliggevano il sistema di raccolta, trattamento e smaltimento dei rifiuti della Regione Campania; *iiiiii)* la mancata adozione di una strategia di comunicazione completa e accessibile, al fine di informare il pubblico in modo proattivo sui potenziali o effettivi rischi per la salute e sulle azioni intraprese per gestire tali rischi.

Alla luce di quanto considerato, la Corte ha dichiarato la fondatezza dei ricorsi presentati ritenendo all'unanimità che vi sia stata violazione dell'art. 2 della Convenzione.

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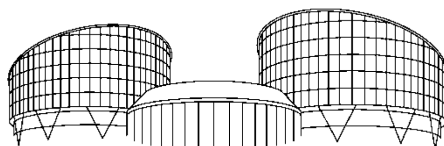

EUROPEAN COURT OF HUMAN RIGHTS
COUR EUROPÉENNE DES DROITS DE L'HOMME

FIRST SECTION

CASE OF XXX v. ITALY

(Applications nos. 51567/14 and 3 others – see appended list)

JUDGMENT
STRASBOURG
30 January 2025

This judgment will become final in the circumstances set out in Article 44 § 2 of the Convention. It may be subject to editorial revision.

In the case of XXX v. Italy,

The European Court of Human Rights (First Section), sitting as a Chamber composed of:
Ivana Jelić, *President*,
Alena Poláčková,
Georgios A. Serghides,
Tim Eicke,
Erik Wennerström,
Raffaele Sabato,
Frédéric Krenc, *judges*,
and Ilse Freiwirth, *Section Registrar,*

Having regard to:

the applications (nos. 39742/14, 51567/14, 74208/14 and 24215/15) against the Italian Republic lodged with the Court under Article 34 of the Convention for the Protection of Human Rights and Fundamental Freedoms ("the Convention") by the individuals and organisations listed in the appended table, ("the applicants"), on the various dates indicated in the appended table;

the decision to give notice to the Italian Government ("the Government") of the complaints concerning Articles 2, 8, 10 and 13;

the decision to give priority to the applications (Rule 41 of the Rules of Court);

the observations submitted by the respondent Government and the observations in reply submitted by the applicants;

the third-party comments submitted by ClientEarth; MacroCrimes; the coordinated submission of the Forum for Human Rights and Social Justice of Newcastle University, the Newcastle Environmental Regulation Research Group of Newcastle University, Let's Do It! Italy, and Legambiente; Professor M. Carducci and Mr V. Lorubbio (Centro di Ricerca Euro Americano sulle Politiche Costituzionali - CEDEUAM); Professor F. Bianchi (Pisa Institute of Clinical Physiology); Mr G. D'Alisa (University of Coimbra) and Professor M. Armiero (KTH Royal Institute of Technology in Stockholm), who were granted leave to intervene by the President of the Section;
Having deliberated in private on 17 December 2024,
Delivers the following judgment, which was adopted on that date:

INTRODUCTION

1. The main issue in the present case is whether the authorities failed to take appropriate and sufficient measures to protect the lives of the applicants living in areas of the Campania Region affected by a large-scale pollution phenomenon stemming from illegal dumping, burying and/or uncontrolled abandonment of hazardous, special and urban waste, often associated with its incineration. The case raises issues under Articles 2 and 8 of the Convention.

THE FACTS

2. The applicants and their representatives are listed in Annex I.
3. The Government were represented by their Agent, Mr L. D'Ascia, and by G. Palatiello and F. Fedeli, State Attorneys.
4. The facts of the case, as submitted by the parties, may be summarised as follows.

I. "*Terra dei Fuochi*": the context

5. The expression "*Terra dei Fuochi*", which translates literally as "Land of Fires", appeared for the first time in a 2003 report by the association *Legambiente onlus* (a non-profit association for environmental protection), in which it called attention to the illegal dumping and burning of hazardous waste on the territory of the municipalities of Qualiano, Villaricca and Giugliano, in the province of Naples.
6. As defined by the Campania Regional Agency for Environmental Protection ("the ARPAC"), the *Terra dei Fuochi* area refers to the territory between the province of Naples and the south-western area of the province of Caserta. The pollution of the territory in question, referred to as the *Terra dei Fuochi* phenomenon" (Sixth parliamentary commission of inquiry, Report on Campania, 28 February 2018, p. 195; see paragraph 9 below), stems from the illegal dumping, burying and/or uncontrolled abandonment of hazardous, special and urban waste, frequently combined with its incineration.
7. An inter-ministerial directive issued on 23 December 2013 initially identified fifty-seven municipalities in the provinces of Naples and Caserta affected by this phenomenon. The inter-ministerial directives of 16 April 2014 and of 10 December 2015 added, respectively, a further thirty-one and two municipalities to the list (see Annex II for a complete list of the municipalities). According to a report of 19 January 2018 by the Italian Senate's 12th Committee

(Health and Hygiene), the above directives set out a legal delimitation for what the committee refers to as the *Terra dei Fuochi* zone (*il territorio Terra dei Fuochi*), comprising ninety municipalities affected by illegal waste disposal practices (see pp. 49-50 of the 12th Committee's 2018 report). These municipalities have consistently been referred to as the *Terra dei Fuochi* municipalities and the *Terra dei Fuochi* zone in a wide range of official documents and instruments.

8. The *Terra dei Fuochi* zone, as defined above, has a population of about 2,900,000 inhabitants, or 52% of the population of the region of Campania. The ARPAC refers to the inhabitants of such municipalities as the "population exposed" to the *Terra dei Fuochi* phenomenon.

II. *Terra dei Fuochi*: the evidence

9. Between 1995 and 2018 several parliamentary commissions of inquiry into the waste management cycle and related illegal activities ("the parliamentary commissions of inquiry") were set up under the relevant legislation (resolution of the Chamber of Deputies of 20 June 1995 - "the first parliamentary commission of inquiry") and Laws no. 97 of 10 April 1997 ("the second parliamentary commission of inquiry"), no. 399 of 31 October 2001 ("the third parliamentary commission of inquiry"), no. 271 of 20 October 2006 ("the fourth parliamentary commission of inquiry"), no. 6 of 6 February 2009 ("the fifth parliamentary commission of inquiry", no. 1 of 7 January 2014 ("the sixth parliamentary commission of inquiry") and no. 100 of 7 August 2018 ("the seventh parliamentary commission of inquiry"). The mandate of the parliamentary commissions of inquiry covered the entire Italian territory.

10. The first of these parliamentary commissions of inquiry began its work on 27 July 1995. In its report of 11 March 1996, it noted the presence of multiple illegal dumping sites in the provinces of Caserta and Naples, particularly in the countryside around Aversa and the Domizio-Phlegrean coast, which were controlled at local level by organised criminal groups. It also noted that no supervision or clean-up plan had been put in place, although the authorities had been aware of the phenomenon of illegal dumping and burying of hazardous waste since at least 1988, and it was increasing in areas where the groundwater supply was frequently used for irrigation purposes (p. 44 of the report).

The commission indicated that, according to a report on health screening in the territory overseen by Naples local health authority no. 4 (*azienda sanitaria locale*, "the ASL") and presented at a seminar organised by the ASL in 1995, death rates from cancer had increased by 100% in the thirty-five municipalities falling within its sphere of competence (p. 10 of the report). A significant number of these municipalities were later included in the list of *Terra dei Fuochi* municipalities (see paragraph 7 above). The commission noted with concern that there had been an increase in cases of lymphoma, leukaemia, and liver tumours in the area comprising the Acerra, Marigliano, and San Vitaliano municipalities.

The commission further drew attention to the fact that the first investigations into illegal burying and dumping of hazardous waste had taken place from 1993 onwards, although the problem had been known since 1988 (pp. 47 and 48 of the report). It also recommended that environmental offences be classified as serious offences (*delitti*) rather than as minor offences (*contravvenzioni*) (pp. 29 and 44 of the report).

According to the commission, the spread of the pollution phenomenon was due, among other reasons, to a lack of sufficient rigour, combined with an inadequate understanding of the related

dangers in terms of environmental protection and health; a vast network of complicity, particularly within the administration; and the inappropriateness of the penalties available for combatting this phenomenon (p. 48 of the report).

11. The second parliamentary commission of inquiry commenced its work in July 1997.

12. On 7 October 1997 C.S., an informer (*collaboratore di giustizia*), was heard by the commission and informed it about the existence of a large-scale phenomenon of systematic burying of hazardous waste in parts of Campania. His statements were classified as a State secret and were ultimately only released to the public in 2013 (see paragraph 40 below).

13. On 22 April 1998 the second commission of inquiry published a report containing proposals for the introduction of environmental offences into the criminal-law framework. It considered that the environmental legislation enacted in the preceding years had resulted in an uneven and often poorly coordinated interpretation and application of the existing framework, which did not provide for serious offences (*delitti*). Instead, it classified environmental offences as minor offences (*contravvenzioni*), which in Italian law are almost always limited in scope and subject to less severe penalties. The deterrent and repressive effect of such a framework was described by the commission as "practically non-existent", especially if the modest penalties were compared with the highly lucrative nature of the illegal activities related to waste management. It also pointed out that the operational and procedural tools that were provided to the police and judiciary by this framework were limited, creating hurdles for effective investigation of the conduct at issue.

14. In its report on Campania, published on 8 July 1998, the same commission of inquiry emphasised that an exceptional concentration of heavy metals had been observed in certain areas, such as the territory of the Villa Literno municipality. An increase in cancers in the province of Caserta was also noted. The commission urged that epidemiological research be carried out to establish whether there existed a link between this increase and the illegal dumping of dangerous waste on the territory in question (p. 40 of the report). It noted, firstly, the existence of what it referred to as "persistent poisoning" of the soil in the territory of Campania, and, secondly, that the relevant authorities had not yet addressed the subject of decontamination with the necessary firmness (pp. 26 and 27 of the report). Criminal-law investigations had so far highlighted that, in several areas across the territory of Campania, pits had been dug for the disposal of waste, resulting in the contamination of groundwater and damage to the surrounding land (pp. 30 and 31 of the report). These investigations had further disclosed large-scale waste trafficking practices involving the transportation of dangerous waste from Northern Italy to waste storage facilities in the Caserta province, where they were illegally requalified as non-dangerous waste and then disposed of in illegal landfills (pp. 33-34 of the report). Between 1994 and 1998 the Santa Maria Capua Vetere prosecution service had ordered the seizure of one thousand contaminated sites. It also asserted that, as a result of the dumping of millions of tons of dangerous and toxic waste, the Campania region was being used as "the dustbin of Italy" (p. 32 of the report).

The commission further noted that the judges and prosecutors who had provided statements had emphasised on numerous occasions that it was impossible to secure convictions for environmental crimes (p. 36 of the report). It reiterated its commitment to re-examining the proportionality of the penalties available, which related mostly to administrative offences (p. 38 of the report).

It considered that it was necessary to introduce, as a matter of priority, an environmental decontamination programme, particularly in the Domizio-Phlegrean coast and the countryside around Aversa (p. 40 of the report), and to ensure that preventive administrative checks were more effective (p. 38 of the report). In the commission's view, the Italian institutions already had at their disposal technology enabling them to detect pollutants in the soil and to identify the areas affected by illegal waste disposal.

15. In April 2003 the environmental association *Legambiente* published its annual report on environmental crime, entitled "*Ecomafie*", in which it reported on practices of illegal open-air waste incineration, occurring on a daily basis in several areas, particularly in the Giugliano, Qualiano and Villaricca municipalities.

16. On 7 April 2004 the third parliamentary commission of inquiry took statements from a Public Prosecutor at the Santa Maria Capua Vetere District Court; his office had been involved in investigations into illegal waste trafficking since the early 1990s.

He described practices concerning the illegal burying and systematic dumping of waste that emerged from the investigations. His office had gathered evidence of the existence of approximately 980 illegal rubbish tips which had been discovered by the ARPAC between 2000 and 2002 in the Naples and Caserta Provinces. The information that had been gathered indicated that thousands of tonnes of waste had been illegally disposed of in Campania. It was noted that when waste was not simply dumped, it was sometimes mixed with other substances to be used, for example, as material in construction activities or compost for fertilising land.

He also reported on specific methods, identified during the investigations, to sidestep the existing checks and to dump waste or transform it into raw materials.

He also reported on the problem of illegal incineration in the Caserta and Naples provinces, citing the findings of an investigation conducted by his office into dioxin contamination. Dioxin had resulted in the pollution of a considerable area, particularly in the municipalities of Marcianise, and San Felice a Cancello, bordering Acerra on the one hand, and Casal di Principe and Castel Volturno on the other. Investigators had ascertained that in the vast majority of cases the dioxin had been released through the illegal burning of waste and by the illegal combustion practices of certain companies in the aluminium and iron sectors.

With regard to measures to clean up the areas contaminated by the illegal disposal of waste, he cited the example of a rubbish tip that his office had placed under seizure in 2000 on account of buried barrels containing toxic waste. His office had contacted the authorities responsible for decontamination, who had replied that they did not know where to dispose of such waste in Italy. Nothing further had been done.

With regard to the possible consequences of these practices on the environment and on public health, the public prosecutor described the enormous difficulties encountered by his office in obtaining information in this connection, and the absence of epidemiological studies into the health effects of the illegal practices at issue. His office had been able to retrieve only some data, again with great difficulties, from local health authorities.

17. In its activity report, issued on 28 July 2004, the third parliamentary commission of inquiry reported on the persistence and increase, at the time the report was drafted, in the trafficking of large quantities of often hazardous waste from northern to southern Italy. Once there, the waste was

disposed of in various ways. One method by means of dumping and burying the waste in illegal tips, which were frequently quarries, waterways (such as in stretches of water along the Domizio-Phlegrean coast), or large pits that were sometimes dug on agricultural land and then covered up, with the land continuing to be used for agriculture thereafter. Another method of waste disposal involved mixing hazardous waste with other waste and using it in the production of compost for fertilising purposes (pp. 53 and 54 of the report). The commission referred to investigations, begun in 1999, in relation to an area in the Naples province; these had disclosed the trafficking of approximately one million tonnes of waste. This waste was made up of dangerous materials, including dust from smoke abatement in iron and metal industries, waste paint and residue containing nonhalogenated organic solvents, mineral-oil combustion ashes, industrial sludge, sludge from water-treatment processes, and acid mud.

The commission pointed out the lucrative nature of these activities for criminal organisations and noted that they represented an attractive cost-reducing strategy for certain industries (pp. 52 and 53 of the report).

The commission further reported on what it defined as a "dioxin emergency" in the Caserta province. The commission noted that this province and the Northern Naples countryside were littered with illegal rubbish tips and had become "a receptacle for waste of every kind". They noted that, in addition to illegal burying, waste was very often set on fire in these areas. This combustion of waste, which included hazardous waste, generated tall, dense, black columns of smoke and released, amongst other substances, dioxins. In addition to such fires, the committee reported on two incidents of illegal combustion "of vast proportions" which had occurred in car-tyre disposal companies in Marcianise and Castelvolturno, described as "actual mountains of car tyres gone up in smoke" (p. 54 of the report).

Lastly, the commission noted that, in addition to the illegal trafficking and disposal of waste by organised criminal groups, one aspect of the problem that ought not to be underestimated was the illegal disposal of waste by small companies at local level and by "ordinary citizens" who used public land, regarded by them as *res nullius*, to dispose of their waste. In this latter connection, the commission reported that individuals often disposed in this way of bulky household items, which posed a danger to health in that they often contained Polychlorinated biphenyls (PCBs) (p. 52 of the report).

18. In September 2004 a study published by *The Lancet Oncology* (a medical journal) reported that the cancer mortality rate in Naples local health authority no. 4 had grown continually over the periods 1970-1974 and 1995-2000. In addition, the health authority's register of tumours also showed that in February 2002 the mortality rate from colorectal cancer, liver cancer, leukaemia and lymphoma was higher in district no. 73 – which included the towns of Nola, Marigliano and Acerra (adjoining the municipality of Somma Vesuviana) – than in the rest of the territory falling within the ASL's remit. The rates of liver cancer, leukaemia and lymphoma were very high compared with those in the rest of Italy. According to one of the authors of the study, this data suggested that there was a causal link between pollution resulting from inappropriate waste management and the existence of illegal rubbish dumps on the one hand, and the region's high rates of cancer mortality on the other. Both authors agreed that the link between illegal hazardous waste disposal and cancer mortality had to be investigated as a matter of urgency.

19. In November 2004 an article published in *Epidemiologia&Prevenzione* (a journal of the Italian Epidemiology Association) analysed mortality due to specific causes in an area of Campania characterised by the presence of illegal rubbish tips, in many of which waste was also incinerated, and sites affected by the illegal burial of industrial waste. The study area covered the Giugliano in Campania, Qualiano and Villaricca municipalities, which had a total population of approximately 150,000 inhabitants. According to investigations by the ARPAC and *Legambiente*, thirty-nine illegal landfill sites had been identified in the study area, of which twenty-seven were presumptively affected by the presence of hazardous waste. In the study area, cancer mortality was found to have significantly increased, particularly with regard, *inter alia*, to cancers of the lung, pleura, larynx, bladder, liver and brain.

20. In its further report of 22 December 2004, the third parliamentary commission of inquiry (see paragraph 16 above) addressed in more detail the introduction of environmental offences into the criminal-law framework. The commission made a general statement to the effect that there were multiple factors which undermined the effectiveness and deterrent effect of the criminal-law framework governing environmental offences. In particular, it highlighted the absence of any overarching framework (*intervento-quadro*) that would harmoniously regulate the existing offences, which had been introduced over time and through different instruments. Moreover, a large number of the criminal penalties applicable to the existing offences reflected the regulatory nature of the offences. Among other things, this entailed short statutory limitation periods. The regulatory nature of the offences also precluded the use of certain investigative tools, which were reserved by the Code of Criminal Procedure for criminal offences, and also limited the applicability of certain interim measures (*misure cautelari*).

The commission highlighted the significance of the introduction, in March 2001, of the offence of "organised activities for the trafficking of waste" (see paragraph 131 below). However, it emerged from the statements made to the commission by investigating judges and investigative police officers that the evidentiary burden in relation to this offence was at times impossible to meet, given the very specific nature of the conduct constituting the offence (ibid.). The commission found this to be a cause for concern in terms of deterrence.

21. In January 2005 the results of the first phase of research (*Studio Pilota*) conducted as part of a study by the World Health Organisation (WHO) at the request of the National Civil Defence Department were published. The study focused on the health impact of waste in the Naples and Caserta provinces and had been carried out in cooperation with the Italian Higher Institute of Health ("the ISS"), the Italian High Council for Research ("the CNR"), the Campania Regional Agency for Environmental Protection ("the ARPAC") and the Regional Epidemiological Observatory ("the OER").The results showed that the mortality risk associated with tumours of the stomach, liver, bile ducts, trachea, bronchi, lungs, pleura and bladder, and the risk of cardiovascular, urogenital and limb malformations, were higher in an area straddling the provinces of Naples and Caserta than in the rest of Campania. The conclusions pointed to the importance of more in-depth investigations on the issue.

22. On 22 March 2005 the Commission of the European Communities (which on 1 December 2009 became the European Commission; "the European Commission") brought an action for non-compliance against Italy before the Court of Justice under Article 226 of the Treaty establishing the

European Community ("TEC") (Case no. C-135/05). Criticising the existence of a large number of illegal and unsupervised landfill sites in Italy, the Commission alleged that the Italian authorities had failed to honour their obligations under Articles 4, 8 and 9 of Directive 75/442/EEC on waste, Article 2 § 1 of Directive 91/689/EEC on hazardous waste and Article 14, letters (a) to (c), of Directive 1999/31/EC on the landfill of waste.

23. On 13 June 2005, the Campania Regional Executive approved an initial regional decontamination plan ("the PRB").

24. On 3 April 2006 the Italian Government passed Legislative Decree no. 152 (the Framework Law on the Environment), Article 239 of which established that, with the exception of sites of national interest (see paragraph 120 below), responsibility for the clean-up operations in contaminated zones lay with the regions, which were required to introduce regional decontamination plans.

25. In 2007 the results of the second phase of the study conducted by WHO, the ISS, the CNR, the ARPAC and the OER (see paragraph 21 above) were published. They showed that the area with the highest rates of cancer mortality and malformations was that which had been most affected by the illegal disposal of hazardous waste and the uncontrolled incineration of solid urban waste. According to the same report, this correlation suggested that exposure to waste processing had an impact on the mortality risk observed in Campania, although the prevalence of certain infections and viruses and the widespread use of tobacco products might also have influenced the mortality rate. Among the conclusions of the study, the following may be highlighted:

Numerous positive and statistically significant (and therefore not accidental) associations were found between health and hazardous waste. (...). In the interpretation of the results some limitations ... must be borne in mind. In any event, the observed associations, their consistency and coherence, suggest that exposure to substances released from hazardous waste not disposed of correctly, undergone by the population in the last decades plays a significant role as a determinant of health in the Naples and Caserta provinces. While on the one hand it is necessary to fill numerous knowledge gaps as regards effects on health, it is urgent to implement and strengthen measures to reduce exposure, via integrated waste management policies.

26. On 26 April 2007 the Court of Justice of the European Union (formerly the Court of Justice of the European Communities; "the Court of Justice" or "the CJEU") handed down its judgment in the proceedings initiated by the Commission on 22 March 2005 (*Commission v Italy*, C-135/05, EU:C:2007:250; see paragraph 167 below). In this judgment, the CJEU noted "the general non-compliance of the tips [with the relevant] provisions" of EU law, observing, *inter alia*, that the Italian Government "does not dispute the existence ... in Italy of at least 700 illegal tips containing hazardous waste, which are therefore not subject to any control measures. It concluded that the Italian Republic had failed to fulfil its obligations under the provisions cited by the Commission, in that it had failed to adopt all the necessary measures to ensure that waste was recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and had failed to prohibit the abandonment, dumping or uncontrolled disposal of waste.

27. On 13 June 2007, the fourth parliamentary commission of inquiry published a report on Campania in which it noted that "the situation with regard to the waste management cycle show[ed]

signs of a dangerous regression, leading to a collapse in the [waste management] service's operational capacity and entailing serious risks for public health".

28. In its report of 19 December 2007, the fourth parliamentary commission of inquiry noted, in particular, that "a good part of the territory [was] still contaminated by piles of abandoned waste", that "the local authorities [were] less and less willing to open new disposal sites or to [allow] the creation of [a relevant] infrastructure", that "confidence in the capacity of State entities to instigate clean-up and development programmes for the regions that were most affected by the environmental degradation [was] practically non-existent" and that "in addition, and fatally, this was coupled with the inclusion of organised criminal groups in the waste management circuit, which contrast[ed] with the largely ineffective nature of the administrative supervisory arrangements". It also had "the feeling that crisis [had] given way to tragedy".

29. On 3 July 2008 the European Commission brought a new action for non-compliance against Italy under Article 226 TEC (Case no. C-297/08).

30. In March 2009 the US Navy published a report entitled "Naples Public Health Evaluation (PHE) - Public Health Summary - Volume II: Phase I Screening Risk Evaluation", in the context of an investigation of potential risks to the health of U.S. Navy personnel resident in the Naples area of Campania (identified as a 395 square-mile regional area) arising from illegal waste disposal practices and shortcomings in waste management. The relevant extracts of the report read as follows:

"For more than a decade, the Campania region of Italy has experienced numerous challenges associated with trash collection, uncontrolled, open burning of uncollected trash, and widespread dumping of waste, including chemical and other potentially hazardous waste. ... In response to health concerns expressed by the United States Navy and their civilian personnel and families, the Commander Navy Region Europe, Africa, Southwest Asia contacted the Navy Bureau of Medicine and Surgery and requested that the Navy and Marine Corps Public Health Center conduct a comprehensive Public Health Evaluation.

The first phase of this study entails an Environmental Testing Support Assessment, which includes a screening risk evaluation of air, tap water, soil, and soil gas data. This report documents the findings of a screening risk evaluation (SRE). The purpose of the SRE is to determine whether or not there are any potential health impacts associated with exposure to surface soil, indoor air, tap water, and ambient (outdoor) air on USN personnel (active duty, civilians, and their families), residing in the Naples area of Campania. This SRE was conducted in accordance with U.S. Environmental Protection Agency (USEPA) Risk Assessment Guidance. ... The results of this SRE will be used to determine:

Whether or not exposure to surface soil, indoor air, tap water, and ambient air poses an unacceptable risk to USN personnel, based on USEPA and USN risk assessment guidelines;

If additional investigations are necessary to ensure the safety and well-being of USN personnel residing in Campania;

...

31. On 4 March 2010 the Court of Justice handed down its judgment in *Commission v. Italy* (C-297/08, EU:C:2010:115). While noting that Italy had taken measures in 2008 to tackle the "waste crisis", the CJEU concluded that there existed in Italy a "structural deficit in terms of the installations necessary

for the disposal of the urban waste produced in Campania, as evidenced by the considerable quantities of waste which [had] accumulated along the public roads in the region".

It held that Italy had "failed to meet its obligation to establish an integrated and adequate network of disposal installations enabling it ... to [ensure the] disposal of its own waste and, in consequence, [had] failed to fulfil its obligations under Article 5 of Directive 2006/12". According to the Court of Justice, that failure could not be justified by such circumstances as the opposition of the local population to waste disposal sites, the presence of criminal activity in the region or the non-performance of contractual obligations by the undertakings entrusted with the construction of certain waste disposal infrastructures. It explained that this last factor could not be considered *force majeure*, because "the notion of *force majeure* require[d] the non-performance of the act in question to be attributable to circumstances, beyond the control of the party claiming *force majeure*, which [were] abnormal and unforeseeable and the consequences of which could not have been avoided despite the exercise of all due diligence", and that a diligent authority should have taken the necessary precautions either to guard against the contractual non-performance in question or to ensure that, despite those shortcomings, actual construction of the infrastructures necessary for waste disposal would be completed on time. The Court of Justice also noted that "the Italian Republic [did] not dispute that the waste littering the public roads totalled 55,000 tonnes, adding to the 110,000 tonnes to 120,000 tonnes of waste awaiting treatment at municipal storage sites". Concerning the environmental hazards, the Court of Justice reiterated that, regard being had in particular to the limited capacity of each region or locality for waste reception, the accumulation of waste constituted a danger to the environment. It concluded that the accumulation of such large quantities of waste along public roads and in temporary storage areas had given rise to a "risk to water, air or soil, and to plants or animals" within the meaning of Article 4(1)(a) of Directive 2006/12, had caused "a nuisance through noise or odours" within the meaning of Article 4(1)(b), and was likely to affect "adversely ... the countryside or places of special interest" within the meaning of Article 4(1)(c) of that Directive. As to the danger to human health, the Court of Justice noted that "that the worrying situation of accumulation of waste along the public roads [had] exposed the health of the local inhabitants to certain danger, in breach of Article 4(1) of Directive 2006/12".

32. In May 2011, the US Navy published a further report entitled "Naples Public Health Evaluation (PHE) - Public Health Summary - Volume III", which summarised research covering the period January 2008 to June 2011 in the context of its assessment of potential risks to the health of U.S. Navy personnel resident in the Naples area (see paragraph 30 above). According to this report there was:

"Limited availability of information from Italian environmental regulators to determine the nature and extent of contamination where USN personnel reside ... Limited access to host nation public health reports, studies, and public health officials ... (p. P-5).

From a region-wide perspective, both clustered and random distributions of Unacceptable homes [i.e. residences in proximity to locations found to be Unacceptable under the Navy's risk criteria] were found; therefore, it is not possible to predict locations of Acceptable residences ... (p. ES-8).

... there is a widespread frequency and distribution of Unacceptable homes throughout the nine study areas ...

... a decades-long (early 1980s) history of illegal hazardous waste dumping as extensively documented by the Italian Government in the Regional Agency for Environmental Protection of

Campania ... Caserta province has the highest number of areas where illegal dumping of waste has occurred: 851 sites which include Litorale Domizio-Flegreo and Agro-Aversano .... The majority of the USN nine study areas for the PHE lie within the footprint of one or more of these "Sites of National Interest" in Campania (see Figure 1-3).

...There is documented lack of progress by the Government of Italy in characterization and clean-up of these sites, as well as a lack of an integrated and adequate network of disposal installations required to accomplish these actions. ... (p. ES-9).

... Residences located in the New Lease Suspension Zones (NLSZ) [...] exhibited significant and widespread exceedances and had the highest and most frequently Unacceptable concentrations of chemicals detected during the PHE ...."

In addition, the Navy and Marine Corps Public Health Center (NMCPHC) recommended to the Commander Navy Region Europe, Africa, Southwest Asia (CNREURAFSWA), *inter alia*, that it*:*

"Encourage/educate future residents to lease multi-story buildings and live on the first floor up from the ground floor or higher, which will significantly mitigate concerns associated with vapor intrusion from soil gas ...;

Maintain indefinitely the July 2008 Bottled Water Advisory for off-base personnel for drinking, food preparation, cooking, brushing teeth, making ice, and for pets (p. ES-9)".

The EHIC (Environmental Health Information Center), which is located at the U.S. Naval Hospital in Naples "also makes immediate notification calls to residents whose homes were sampled and that may have results that exceed the USN's risk management criteria for notification and/or relocation".

In a section devoted to the challenges and limitations encountered in conducting the public-health evaluation, the following considerations were noted:

As a guest in a host nation, the USN's ability to perform a complete human health risk assessment on Italian-private or USN-leased property, as it would do in the U.S., was extremely limited. In addition, the ability of USN to conduct the PHE was affected by the thousands of waste sites, both identified and unidentified, in the Campania region for which USN had no data concerning chemicals or their concentrations. Further investigation is needed by the Italian environmental regulatory agencies to document the nature and extent of environmental contamination.

Among other examples of significant challenges and uncertainties, the report listed the influence of organised criminal groups on the waste disposal industry.

33. On 24 September 2012 a tumour registry for the provinces of Naples and Caserta was created by Decree no. 104 of the President of the Campania regional council (g*iunta regionale*). This register was intended to establish an integrated health-environmental monitoring system for the purpose of assessing, without delay, the need for protection of the public from environmental risks.

34. By Ministerial Decree of 26 November 2012 the Minister of the Interior provided for the appointment of a Deputy Prefect to act as a coordinator of existing initiatives, to provide support to Prefectures and local authorities in the region, and to act as a liaison between law enforcement and the different entities involved in the efforts to combat illegal waste disposal practices. The Deputy Prefect taking on this role would be referred to as the Delegated Official for the phenomenon of waste incineration in the Campania region (*L'incaricato per il fenomeno dei roghi di rifiuti nella regione Campania* - "the Delegated Official").

35. On 5 February 2013, the fifth parliamentary commission of inquiry set up under Law no. 6 of 6 February 2009 published a report in which it criticised the "environmental disaster" then taking place in the city of Naples and part of the Campania region, finding that it amounted to a phenomenon with a historical impact "comparable only to the spread of the plague in the seventeenth century" (p. 792 of the report).
With more specific regard to the illegal incineration of waste, the commission of inquiry pointed to the statements made before it in 2012 by the President of the Province of Caserta, to the effect that this phenomenon had a twofold impact, namely (i) a reduction in quality of life; and (ii) a dangerous increase in cancer cases, a matter which was of even greater concern and was evident from the statistical data (p. 144 of the report). The commission of inquiry emphasised that only 20% of tyres were disposed of in a lawful manner (p. 144 of the report) and that, in consequence, the destruction of the remaining 80% (which were burnt illegally) resulted, among other problems, in the dispersion of dioxin in the atmosphere, posing a serious threat to health. By way of example, the commission of inquiry noted that on the Calabricito site (Acerra municipality), the dioxin level in 2006 was 100,000 times higher than the legally permitted limit (report on the Campania region, approved on 26 January 2006, p. 53).
In the same 2013 report, the commission of inquiry noted that the problem originated in the activities carried out from the 1980s onwards by organised criminal groups. It cited an investigation, launched as far back as 1992 by the Naples prosecution service, which found evidence that, over a four-year period, five hundred thousand tonnes of waste had been illegally disposed of. It asserted that the environmental "massacre" (*scempio*) had not ceased in the intervening years and that incalculable and irreversible harm had been done, especially in view of the transfer of polluting substances from the environment to the food chain, without it being possible, at the date the report was drawn up, to establish with certainty the effects on public health (p. 15 of the 2013 report).
36. On 29 April 2013 the ARPAC adopted a set of "Guidelines for the removal of abandoned waste". They contain instructions on the identification, classification, and removal of waste on both public and private property, as well as the steps to be taken following this removal, such as interventions to dissuade future dumping (for example, fencing off the land in question, setting up CCTV cameras, and patrolling of the area by law-enforcement bodies).
37. On 10 June 2013 the President of the Italian Senate authorised the launching of an investigation to be carried out by the Senate's 12th Committee (Hygiene and Health) into environmental pollution and its impact on cancer rates, foetal and neonatal malformation and epigenetics (*inquinamento ambientale ed effetti sull'incidenza dei tumori, delle malformazioni feto-neonatali ed epigenetica*) in the geographical area of the Campania Region known as *Terra dei Fuochi* (p. 3 of the 12th committee's 2018 report). The study arose from the need to protect the health of a vast population, which had been exposed to environmental contaminants illegally disposed of over many years and was intended, among other aims, to gain an understanding of the various and complex facets of the so-called "*Terra dei Fuochi* phenomenon".
38. On 11 July 2013 an Agreement for the *Terra dei Fuochi* (*Patto per la Terra dei Fuochi*) was signed by the Campania Region, the Naples and Caserta Provinces and Prefectures, eighty municipalities affected by illegal incineration of waste, the ARPAC, local health authorities and a number of environmental organisations (including *Legambiente*). Under this agreement, the Campania Region

earmarked 5 million euros (EUR) to finance projects aimed at tackling the illegal burning of waste. The prefectures undertook to develop a plan to monitor the territory and the Municipalities committed themselves to removing waste abandoned in streets and public areas, in line with guidelines developed by the ARPAC (see paragraph 36 above).

39. On 25 October 2013 the Campania Regional Executive Authority approved a regional decontamination plan pursuant to Legislative Decree no. 152 of 2006.

40. On 31 October 2013 the President of the Chamber of Deputies declassified the statements made by C. S. on 7 October 1997 (see paragraph 12 above), in which he had informed the Italian Parliament about the existence of a large-scale phenomenon of systematic burying and dumping of hazardous waste, which had been taking place since at least 1988. C.S. stated that evidence of these practices of trafficking and burying waste had been made available to law-enforcement bodies as of 1993. He further described how organised criminal groups disposed of waste from a variety of sources, ranging from household waste from certain municipalities in Campania whose landfills were full, to industrial waste from Northern Italy and foreign countries. As an example of how the waste was disposed of, C.S. described how in 1988 the construction of a highway between Caserta and the Domizio-Phlegrean coast had provided an opportunity to fill approximately 240 hectares of excavated land with hazardous waste from different sources. He described how holes were often dug to a depth that reached the aquifers. The fifth parliamentary commission of inquiry noted that the declassification of C.S.'s statements had been widely reported in the media (p. 258 of the report of 28 February 2018).

41. On 28 November 2013 the Campania Region adopted an "Extraordinary monitoring plan on foodstuffs produced in the so-called *Terra dei Fuochi* area. The plan provided for the sampling of animal and vegetable products, including vegetables, milk, eggs, meat, fodder and seeds produced in 120 municipalities in the Campania region, and the testing of such products for contaminants.

42. On 9 December 2013 the Campania Regional Council adopted Regional Law no. 20, entitled "Extraordinary measures for preventing and countering the illegal abandonment and incineration of waste". Amongst other measures, the law provided that municipalities had to establish, within ninety days of the entry into force of the law, registers of areas affected by abandonment and incineration of waste. Such registers were to be updated every six months. The law further provided that the areas identified in such registers could not be used for, *inter alia*, agricultural, tourist or commercial purposes until such time as it could be demonstrated, on the basis of analyses by accredited laboratories, that there were no health or environmental risks.

43. On 10 December 2013 Decree-Law no. 136 , later converted into Law no. 6 of 2014, ("Decree-Law no. 136 of 2013"), was enacted. It introduced a series of urgent measures aimed at addressing what is defined in its preamble as an environmental emergency in the Campania Region. This instrument is often referred to as the *Terra dei Fuochi* Decree. In official documents published by the Italian Chamber of Deputies and summarising its provisions, the instrument is described as having introduced provisions to address a "serious environmental emergency" in parts of the Naples and Caserta provinces, in an area referred to as the *Terra dei Fuochi* territory. The Decree-Law instructed the competent authorities to map the agricultural land in the Campania Region, with a view to detecting the possible presence of contamination linked to the illegal dumping, burying and burning of waste. It further established the criminal offence of illegally burning waste (*combustione illecita di*

rifiuti) and introduced a number of provisions related to environmental monitoring, safety and decontamination measures, and actions to be taken in the sphere of the protection of health (see paragraphs 103-109 below).

44. On 10 December 2013 the European Commission brought yet further proceedings before the Court of Justice, this time for non-compliance under Article 260 § 2 of the Treaty on the Functioning of the European Union (TFEU) (Case no. C-653/13) on account of Italy's failure to adopt all the measures necessary to comply with the judgment in *Commission v Italy* (no. C-297/08).

45. On 23 December 2013 an inter-ministerial directive was issued pursuant to Decree-Law no. 136 of 2013. It contained instructions on how to carry out the mapping and technical investigations provided for in the above-cited Decree-Law. It established a Working Group to identify land that had been contaminated by the discharge and illegal disposal of waste in the Campania Region, to draw up a scientific model for classifying the inspected areas of land on the basis of their pollution levels and, lastly, to prepare reports setting out the results of their investigations and proposals as to the measures to be adopted (see paragraph 111 below). The directive also named fifty-seven municipalities in the provinces of Naples and Caserta in which these investigations were to take place as a matter of priority (see the list in Annex II).

46. On 10 March 2014 the Working Group published a report which classified the plots of land for which investigations had to be conducted into five "presumed risk" categories (see paragraph 112 below).

47. On 11 March 2014 an inter-ministerial Decree identified the plots of land in the fifty-seven municipalities listed in the inter-ministerial decree of 12 December 2013 (see paragraph 45 above) which were to be subjected to sampling and testing. Priority was to be given to land classified under the highest "presumed risk" categories, namely categories 5 to 2b (see paragraph 112 below). Pending completion of the analyses in respect of each of these plots, the decree prohibited the sale of produce from any land in the latter categories.

48. In 2014 the different entities forming the Working Group, including the ARPAC, the University of Naples and the *Istituto Zooprofilattico Sperimentale del Mezzogiorno* ("the IZSM"), began sampling and other technical activities in their respective sphere of competence. The investigations started in the areas identified as being within the highest "presumed risk" categories (see paragraph 112 below).

49. On 16 April 2014 an inter-ministerial directive named a further thirty-one municipalities in the provinces of Naples and Caserta in which the direct investigations were to take place (see the list in Annex II).

50. On 12 May 2014, the ARPAC began sampling activities provided for by the *Extraordinary monitoring plan* (see paragraph 42 above).

51. In July 2014 the results of a biomonitoring study entitled "Priority persistent contaminants in residents of critical areas of the Campania Region, Italy" were published in the scientific journal *Science of the Total Environment*. The study investigated whether living in environmentally degraded areas of the Caserta and Naples provinces had an impact on the inhabitants' exposure to highly toxic persistent contaminants (including Polychlorodibenzodioxins (PCDDs), polychlorodibenzofurans (PCDFs), and polychlorobiphenyls (PCBs, dioxin-like and non-dioxin-like), arsenic (As), cadmium (Cd), mercury (Hg), and lead (Pb)). This was done by testing blood,

blood serum and human milk for these contaminants in a number of otherwise healthy volunteers. Although the concentrations of the listed contaminants in blood were found to be compatible with the current accepted values in European countries and the rest of Italy, the following municipalities were flagged – based on relatively higher biomarker values –as meriting attention for health-oriented interventions: Brusciano and Caivano (As), Giugliano (Hg), Pianura (PCDDs and PCDFs), and Qualiano-Villaricca (As, Hg).

52. In 2015 the Campania Region launched the "QR Code project", a food safety certification system accessible to consumers. Companies which chose to sign up to the project agreed to their products being tested by the IZSM. Once this had been done a QR code was placed on the product label, and consumers could scan the code on their smartphone devices to obtain information on the product, including the results of analyses to detect the presence of contaminants.

53. On 10 February 2015 *Legambiente* published a report focused on the state of play in relation to the *Terra dei Fuochi* phenomenon ("*Terra dei Fuochi: a che punto siamo*?").

It reported that, one year after the entry into force of Decree-Law no. 136 of 2013, progress in implementation had been slow; few analyses of soil and groundwater had been carried out, and no decontamination activities had been carried out in the *Terra dei Fuochi* municipalities. It noted that the phenomenon of waste incineration was ongoing and reported that other illegal practices of waste disposal persisted. It also cited findings of epidemiological studies to the effect that, *inter alia*, there was an excess of mortality and hospitalisation for several types of cancer in the population residing in the over fifty officially identified *Terra dei Fuochi* municipalities. They argued that the health risks linked to illegal waste management practices were increasingly evident and that action had to be taken as a matter of urgency.

It further reported that, from 1991 to the date of drafting, eighty-two criminal investigations had been launched into the illegal disposal of waste in the *Terra dei Fuochi* area by organised criminal groups from the Naples and Caserta provinces.

54. On 12 February 2015 an inter-ministerial decree identified specific plots of land in the thirty-one municipalities listed in the inter-ministerial directive of 16 April 2014 (see paragraph 49 above) which were to be subjected to sampling and testing. Pending completion of the analysis in each of these plots, the decree prohibited the sale of produce from any land in the relevant categories.

The decree further listed the plots of land which, based on the results of testing in the first set of municipalities (see paragraph 47 above), could not be used for agricultural purposes, those that were suitable for agriculture, and those that could be only used for certain types of agricultural production (see paragraph 112 below).

55. In June 2015 the Campania Region launched the "Transparent Campania Integrated Monitoring Programme", led by the IZSM, aimed at obtaining data on human exposure to pollutants on a regional scale and promoting a "culture of transparency" in the spheres of food safety and the environment. The IZSM (in partnership with the ARPAC, the *Terra dei Fuochi* inter-ministerial task force, relevant departments in the universities in the region, the CNR and the Agency for Technology, Energy and Sustainable development) set up a programme to detect of environmental pollution in the region, via sampling of soil, water, air, food of animal and vegetable origin, and wildlife.

56. On 16 July 2015, the Court of Justice handed down its judgment in the proceedings brought by the Commission on 10 December 2013 (*Commission v Italy*, C-653/13, EU:C:2015:478; see paragraph 173 below). In this judgment the Court of Justice noted that the obligation to dispose of waste without endangering human health and without harming the environment formed part of the very purpose of the Union's policy with regard to the environment, by virtue of Article 191 TFEU. In particular, failure to comply with the obligations arising from Article 4 of Directive 2006/12 was likely, by the very nature of these obligations, to endanger human health directly and to harm the environment and had, therefore, to be considered as particularly serious. It considered that significant shortcomings in the Campania Region's ability to dispose of its waste, including the production of urban waste, was such as to compromise seriously the Italian Republic's capacity to reach the objective of national self-sufficiency (see the judgment in *Commission v Italy*, no. C-297/08, EU:C:2010:115, point 70). In addition, it noted that many waste disposal sites across almost all the Italian regions had not yet been brought into line with the relevant provisions on waste management.

57. In September 2015 the National Health Institute published another study, entitled "Mortality, hospitalisation, and tumour incidence in *Terra dei Fuochi* municipalities in Campania" (*Mortalità, ospedalizzazione e incidenza tumorale nei Comuni della Terra dei Fuochi in Campania (relazione ai sensi della Legge 6/2014)*", which had been carried out in application of section 1 § 1 *bis* of Law no. 6 of 2014. In this study the National Health Institute verified the mortality rate, the cancer rate and the morbidity level in the 55 of the municipalities listed in the inter-ministerial Directive of 23 December 2013 (with the exception of the cities of Naples and Caserta; see Annex II), based on hospitalisation data relating to the population's exposure to the polluting contaminants. This research highlighted excessive mortality and hospitalisation rates for both sexes on account of illnesses that could have been caused, *inter alia*, by exposure to the illicit waste dumps and the illegal burning of waste.

This study was part of the "*Sentieri*" project (National Epidemiological Study of Territories and Settlements Exposed to Pollution Risk - *Studio Epidemiologico Nazionale del Territorio e degli Insediamenti Esposti a Rischio Inquinamento*), which was launched in 2007 under the coordination of the National Health Institute with a view to assessing the health profile of populations residing in areas in the "Sites of National interest for decontamination" (see paragraph 120 below).

58. On 21 October 2015 the Delegated Official (see paragraph 34 above) gave evidence to the fifth parliamentary commission of inquiry. In his statement, the Delegated Official highlighted that the illegal incineration of waste in question was a complex, multifaceted phenomenon fuelled by a variety of factors. He pointed out that the waste being illegally burned included, on the one hand, urban waste, and on the other, special waste from industrial activities. The population residing in the affected areas was increasingly concerned about the foul-smelling fumes released from the fires, which concerned an area of approximately 1,000 square kilometres, encompassing different parts of the Naples and Caserta provinces.

With regard to the first kind of waste, he noted that the areas in question were characterised by failings in management of the urban waste disposal cycle. Nonetheless, even in areas where urban waste sorting had increased and the capacity to dispose of it had improved, there was still the problem of individuals who, in order to avoid waste-sorting requirements, chose to abandon bags

of waste in remote areas, often leaving them in municipalities that had not introduced such requirements.
With regard to the second kind of waste, he noted that in the area in question there were textile and tannery industries which frequently produced counterfeited goods. This meant that they produced goods illegally and could not dispose of their production waste lawfully, and thus they turned to illegal means, such as incineration. He noted that the area was also characterised by illegal construction (*abusivismo edilizio*), which led to the illegal disposal and burning of waste from construction sites. As to waste from agricultural activities, he referred to the existence of piles of plastic sheeting and the incineration of containers.
Moreover, the Delegated Official noted with concern that waste was still being stored in what were supposed to be temporary storage sites set up to deal with the waste crisis. He cited as an example 5 million tonnes of waste bales stored in Giugliano and Villa Literno, which he feared could become targets of illegal incineration activities. Such sites had to be monitored so as to prevent potentially serious consequences.
59. In November and December 2015 the Campania Region adopted a programme for the removal, transport and disposal of waste stored in bales at various sites in the Region's five provinces, pursuant to Law Decree no. 185 of 15 November 2015 (also referred to as the "Extraordinary programme for the removal of waste bales"). According to a description of the programme published by the Campania Regional Council, the large amounts of waste stored in the bales was leading to unacceptable conditions in the storage areas, and made it essential to provide for the disposal of such waste without delay. The need to remove this kind of waste was considered to be particularly urgent in what was referred to as the *Terra dei Fuochi* area, which had already been affected by illegal waste disposal and incineration practices, with dangerous consequences for the environment and public health. The programme envisaged a set of actions aimed at the transportation of part of the waste to facilities outside the region, both in Italy and in other EU countries, and outlined actions with a view to disposing of the remaining part within the region. In this latter connection, the programme envisaged adapting existing facilities as well as increasing their number in order to meet these treatment, recovery and disposal requirements.
60. On 10 December 2015 an inter-ministerial directive listed a further two municipalities in the provinces of Naples and Caserta in which direct investigations were to take place (see the list in Annex II).
61. On 26 May 2016 the Regional Law on the waste cycle (Law No. 14) was adopted ("*Norme di attuazione della disciplina europea e nazionale in materia di rifiuti* with a view to regulating the waste management cycle in accordance with the priorities established by European Union directives (including prevention through reduction of waste production, reuse and recovery of material and products as well as disposal, as a residual and minimal system for non-treatable waste).
62. On 1 June 2016 the Special Commissioner for the implementation of a deficit-reducing regional healthcare plan in Campania (*Commissario ad Acta per l'attuazione del Piano di rientro dai disavanzi del SSR campano*) adopted Decree no. 38, which introduced a programme of action for the implementation of the health-related provisions of Law no. 6 of 2014 (see paragraph 107 below). In a report submitted to the Senate's 12th Committee (Health and Hygiene) in October 2017, the Director of technical and operational services of the Campania Region's Health Directorate stated

that this Decree was necessary because, almost two years after the enactment of Law no. 6 of 2014, its health-related provisions had still not been implemented.

The Decree approved, amongst other things, an action programme to strengthen oncological screening and prevention programmes and the implementation of diagnostic and therapeutic treatment plans for cancer patients in the ninety municipalities affected by the illegal dumping and disposal of waste, as identified by the inter-ministerial directives of 23 December 2013, 16 April 2014 and 10 December 2015. Particular emphasis was placed on a set of "priority diseases", including certain kinds of cancer, which had been identified as such by the National Health Institute. Under the heading "Primary healthcare and *Terra dei Fuochi*", the action programme envisaged a fundamental role for general practitioners in promoting health education and involving patients in cancer-screening programmes in the municipalities identified in the inter-ministerial directives. The programme also mentioned that a regional plan to increase medical equipment for cancer diagnosis and treatment had been approved. The programme further envisaged communication campaigns to inform the target population about cancer prevention, diagnosis and treatment, with a view to increasing participation in cancer-screening programmes. Finally, the programme highlighted the importance of strengthening epidemiological surveillance in the area at issue, in particular as regards tumours and birth defects.

63. In June 2016 the National Health Institute and the Northern Naples Prosecution Service signed a research collaboration agreement, aimed at exchanging data and other information stemming from epidemiological monitoring of the population in the North Naples (*Napoli Nord*) area, with a specific focus on excess mortality, cancer incidence, and hospitalisation for medical conditions for which the risk factors included exposure (whether proven or suspected) to pollutants.

64. On 3 August 2016 the ethics committee of the National Tumour Institute (IRCCS) approved an epidemiological study promoted by the IZSM in partnership with the Federico II University of Naples ("SPES - Exposure Study on Vulnerable People"), aimed at investigating the relationship between exposure to environmental pollutants (including Polycyclic Aromatic Hydrocarbons, dioxins and heavy metals) and health in the Campania Region. The study began with a contextual overview, in order to identify sources of contamination and to define geographical areas of interest as "clusters", which were then ranked according to an environmental "Pressure Index" (low-impact, medium-impact and high-impact). It then involved the biomonitoring of people living in these clusters in order to estimate their exposure, by quantifying pollutants in biological samples and investigating their effects. The study population was made up of 4,200 healthy subjects between 20 and 49 years of age who had lived for at least five consecutive years in a number of identified municipalities. Medical and research staff gathered information on their medical history and lifestyle habits, and took biological samples.

65. On 20 September 2016 the Special Commissioner for the implementation of a deficit-reducing regional healthcare plan in Campania adopted Decree no. 98, which established a Regional Oncological Network.

66. On 10 October 2016 the Campania Regional Council adopted an "Action Plan to combat the phenomenon of illegal dumping and incineration of waste" (the "Action Plan") with a view to strengthening actions to prevent and put an end to illegal dumping and incineration of waste and to counter the harmful consequences of such conduct.

The Action Plan noted that despite a reduction in reports of fires (3,000 between January and August 2012, and 1,300 in the same period in 2013) the sheer extent of the phenomenon, coupled with the large number of illegal dumping sites (over 3,300 were being monitored when the report was drafted), meant that further "urgent actions" were necessary in order to strengthen existing efforts, coupled with new initiatives to counter the illegal practices in a more effective manner.

It was noted with concern that illegal methods of waste disposal were considered to be particularly widespread in areas characterised by "inadequate supervision of the territory by law-enforcement bodies, foster[ing] a generalised sense of impunity". Incineration of fire, especially waste derived from industrial processes, had become a "normal epilogue" to acts of illegal dumping. It was highlighted that such a widespread and complex phenomenon required a combination of structural measures capable of ensuring a transition from an emergency situation to the normal management of waste in the region.

Five key "actions" were envisaged by the Action Plan: (1) establishing so-called "operational centres" within selected municipalities (see description below); (2) detecting abandoned waste; (3) extinction of fires; (4) removing and transporting abandoned waste; and (5) creation of waste reception and treatment facilities.

With regard to the "operational centres", their creation and management were entrusted to SMA Campania, an "in-house" public company owned by the Campania Region. The centres were to be given the tasks of receiving, verifying and validating data and reports concerning waste dumping and incineration submitted by various actors on the ground (firefighters in teams deployed specifically for such activities, including Army personnel and SMA Campania staff deployed for monitoring and reporting purposes, as well as private citizens). All the data was recorded and processed through an information platform (called "I.TER"), which would also be used to generate maps identifying sites where waste was dumped or burned. Reports of waste dumping fed into the information system would automatically generate email alerts; these were sent to the relevant municipality, which was required to proceed with removal of the waste. Depending on the kind of incident reported, the relevant law-enforcement body was also alerted. SMA Campania also developed an application that can be downloaded by private citizens on their telephones and be used to send reports, with the data being fed directly into the information system.

As to the detection of dumped waste (Action 2), the plan envisaged setting up surveillance cameras, conducting aerial monitoring using drones and other remotely piloted aircraft systems, and also monitoring and surveillance on the ground by various actors (such as law-enforcement bodies, army personnel or SMA Campania staff), and the development of support services for citizens wishing to report illegal conduct.

With regard to the extinction of fires (Action 3), the "actions" envisaged were the deployment of rapid response firefighting units and the management and disposal of burned waste by "in-house" companies, the ARPAC, and companies listed on the environmental operators register, in compliance with guidelines developed by the ARPAC.

With regard to the removal and transportation of abandoned waste (Action 4), the following measures were envisaged: the conclusion of a Framework Agreement between the Region, provinces, municipalities, other land-owning entities and entities with responsibility for managing public roads. This was deemed an essential step, in order to allocate responsibilities between the

different entities and to streamline and speed up waste removal that had been slowed down due to "administrative hurdles". Other actions involved an initial sifting and packing of waste 'on site'; the transportation from the dumping sites to waste management facilities and the removal of waste from areas under the Region's jurisdiction and in public waterways.

As to the creation of waste reception and treatment facilities (Action 5), a review and identification of existing waste management facilities which could be suitable for the reception of certain categories of waste (car tyres, textile waste, agricultural production waste...) was selected as a first step. The second step was to be the establishment of new facilities or the expansion of existing ones.

67. On 16 December 2016 the Campania Regional Council approved an update to the Regional Plan for the Management of Urban Waste and identified a new set of objectives to be achieved by 2020, such as an increase in the percentage of separated household waste (*raccolta differenziata*) to 65%, to be implemented via door-to-door collection initiatives, an increase in the number waste separation centres, the development of incentives for users of the system, as well as awareness-raising and training for the latter group. The plan also envisaged the financing and construction of facilities for the treatment of compostable waste for groups of municipalities.

68. On 15 March 2017 the IZSM published an Activity Report on the "Transparent Campania" monitoring programme (see paragraph 55 above). The introduction to the report acknowledges the *Terra dei Fuochi* phenomenon, defining it as "the uncontrolled and irresponsible dumping of toxic substances and waste of every kind, often followed by their incineration". It recorded that this polluting activity was carried out in a "systematic" manner and was made possible by a "chain of negligence, omissions and silence", coupled with the authorities being "tragically unprepared" to stop it. This had led, in the view of the IZSM, to a "full-fledged environmental disaster".

The report then proceeded to describe the programme's aims and its organisational structure, the methodology followed and its concrete implementation.

As to soil sampling, the programme envisaged taking 3,300 samples of topsoil to be tested for organic and inorganic compounds. One of the planned activities included testing for the presence of potentially toxic metals and ascertaining the quantities of such metals which could be absorbed by plants. Another aim was to create a "geochemical map" of the distribution and concentration of organic and inorganic compounds. The report recorded that a first set of topsoil samples (approximately 2,000) had been taken and analysed to detect the presence of contaminants (including fifty-three heavy metals, IPAs and PCBs) and that a "geochemical map" was created based on the results of the analysis developed. A second phase involving the sampling of bottom soil, with a view to assessing the possible leachate into groundwater, was also envisaged, although it does not appear to have been carried out as per the report.

As to water sampling, 2500 samples were scheduled to be taken from wells on the premises of 500 food production companies in the region, to be tested for different organic and inorganic compounds. The objectives were to assess the pollution of groundwater and develop a geodatabase. The report indicated that a first set of about 200 samples had been taken in January 2017 and that the results were illustrated in a "map" which identified problematic areas.

As to air-quality monitoring, the programme envisaged the installation of 150 passive air samplers and 50 deposimeters, in order to detect and classify the presence of potentially toxic organic

pollutants (IPAs, PCBs, heavy metals as well as other relevant substances). When the report was drafted in 2017 no results were yet available; it was stated that at least one year of continuous sampling was necessary to gather significant data.

As to human biomonitoring, the report referred to the SPES study (see paragraph 64 above).

69. On 20 June 2017 a Memorandum of Understanding was concluded between the Campania Region, the regional child cancer registry, the cancer registries of the Caserta and Naples local health authorities, the epidemiological service of the Caserta and Naples-3 South local health authorities, the IZSM, the ARPAC and the S. Maria Capua Vetere Prosecution Service, with a view to "adopting joint strategies for the assessment of possible health risks connected to environmental concerns in municipalities under the jurisdiction of the S. Maria Capua Vetere prosecution service".

The preamble to the Memorandum refers to the investigations carried out by the prosecution service, which had disclosed an established, long-standing practice of trafficking dangerous waste and of illegal dumping of waste in areas in the Caserta province. It further cites investigations that confirmed the widespread practice in the same areas - not just by organised criminal groups - of the illegal incineration of waste and the dumping of urban and industrial waste in waterways.

It further points out that epidemiological studies on the population living in the area revealed higher cancer mortality rates when compared to other areas in the same region, and that the authors of such studies hypothesised that environmental factors could be a contributing cause. It further pointed out that the first studies on the rate of new cases of cancer had recently been published by the Caserta local health authority, and that such data may be considered more reliable as "risk indicators" than data focussed only on mortality. Finally, it considered that the available studies were all of a transversal nature and not capable of establishing a direct causal relationship between the sources of risk and cancer. This created a need for cooperation between the signatories in order to investigate the risk of chronic-degenerative diseases and cancer and the "environmental crimes" in the area at issue.

70. On 2 October 2017 a further Memorandum of Understanding was signed between the Campania Region and Invitalia (the "National Agency for the Attraction of Investments and Corporate Development", a public company in which the Ministry of the Economy was the sole shareholder), with a view to speeding up implementation of the measures to decontaminate/clean-up and render safe the areas of 'particular complexity' identified in the PRB (see paragraph 23). The listed actions included actions to render safe the aquifer in the "Area Vasta Lo Uttaro" zone; environmental classification of other "Aree Vaste" with a view to their decontamination; the removal of the remaining waste in fourteen temporary storage sites; and the testing of sediment in such areas.

71. On 9 October 2017 the Director of Technical and Operational Services of the Campania Region's Health Directorate submitted a report to the Senate's 12th Committee (Health and Hygiene) concerning, *inter alia*, the implementation status of the health-related provisions of Law no. 6 of 2014 as of June 2016 (see paragraph 107 below). She reported that a *Terra dei Fuochi* Working Group, assisted by a scientific team, had been set up in March 2017 with a view to creating an inter-institutional network, drawing together all institutional actors dealing with the *Terra dei Fuochi* problem in various capacities and monitoring the activities carried out by these actors. A technical sub-group, bringing together the Heads of the Cancer Registries of local health authorities, the Heads of Epidemiology Services and the Department of Medical and Preventive Sciences at

University of Naples Federico II was created, *inter alia*, to begin a georeferencing study; the aim was to trigger geographical or epidemiological alerts where a particular concentration of cancer cases was found in specific geographical areas. The study would also involve cross-referencing data made available by the ARPAC, hospital discharge records, and mortality data.

She pointed out that the local health authorities in the municipalities affected by the *Terra dei Fuochi* phenomenon had received specific funding in order to implement the health measures provided for in Decree no. 38 of the Special Commissioner (see paragraph 62 above).

An information platform (SANIARP) was being set up to monitor and manage cancer screening by all local health authorities in the region. The Director also provided an overview of the measures envisaged to strengthen cancer screening.

72. On 28 December 2017 the Campania Regional Executive Authority issued resolution no. 831, which updated the 2013 (second) Regional Decontamination Plan (see paragraph 39).

73. On 10 January 2018 the Italian Senate's 12th Committee on Health and Hygiene ("the Senate Committee") published its report in the context of the fact-finding investigation into environmental pollution and its impact on cancer rates, foetal and neonatal malformation and epigenetics (*inquinamento ambientale ed effetti sull'incidenza dei tumori, delle malformazioni feto-neonatali ed epigenetica*), initiated by the President of the Senate on 10 June 2013 (see paragraph 37 above).

The Senate Committee noted that the IZSM described the situation affecting the *Terra dei Fuochi* as an "irresponsible" and "uncontrolled" phenomenon concerning the discharge and incineration of toxic substances and all forms of waste. According to the IZSM, this "criminal" and "systematic" polluting activity was brought about, on the one hand, by a chain of negligence, omissions and silence and, on the other, by a total lack of preparation on the authorities' part to prevent the phenomenon, and had led to a full-fledged environmental disaster (p. 7 of the report).

The Senate Committee described, referring in particular to the area known as the Domizio-Phlegrean coast and the countryside around Aversa, how tonnes of special waste had been dumped, over the course of many years, in illegal tips in agricultural areas, certain waterways and quarries. It noted that the waste in many of these illegal tips had been set on fire, releasing enormous amounts of aromatic polycyclic hydrocarbons and dioxins, which the committee described as substances with well-known harmful effects on health. The committee noted that this situation had led the authorities to include the area in the list of "sites of national interest" (see paragraph 120 below) requiring urgent decontamination (see p. 35 of the report).

It further noted the specific nature of the *Terra dei Fuochi* phenomenon, especially in the light of the following aspects (pp. 11-14 of the report):

- the problem did not involve a limited number of easily identifiable sources of pollution with known features; on the contrary, it was a particularly complex phenomenon, given the multiplicity of pollution sources, which differed as to:

- their type: dumping, discharge or burying and illegal burning of special hazardous waste, the chemical composition of which varied considerably;
- their scale: the illegal dumps were spread out over areas which ranged from less than 1,000 m2 to more than 10,000 m2;
- their locality: the sites were spread out unevenly over the areas in question.
- the various sites differed in several ways:

- the variety of pollutants, which frequently co-existed in a single zone;
- the variety of elements affected by pollution (air, soil, water);
- the different ways in which the polluting substances spread and, in consequence, the diverse ways in which people came into contact with them;
- the difficulty in identifying the populations at risk.

The Senate Committee considered that, having regard to these specific features, the epidemiological assessment was significantly more complex than for other polluted areas, such as the Taranto area, in which the pollution sources were both known and more limited in number and were characterised by specific chemical and physical properties and an easily identifiable at-risk population.
According to the report, the list of municipalities identified in the legislation and decrees had been prepared on the basis of presumptions; however this did not mean that certain areas which had not been included on this list were unaffected by the phenomenon of pollution (p. 51 of the report).
The Senate Committee also stated that when it was set up (in 2013), and also to some extent when its report was prepared in 2018, the authorities had not yet gathered sufficient data about the impact of this pollution on the environment and on public health.
The Commission further noted its investigation showed that the authorities had only recently begun to evaluate the critical extent of the situation, about which they were well informed, and to schedule and carry out preventive action, with considerable delay (p. 3 of the report). The Senate Committee also drew attention to the delay in recognising the seriousness of the phenomenon, especially with regard to the risks to health and the need to take steps for cancer detection among the relevant population groups (p. 7 of the report).
The Senate Committee also highlighted that the *Terra dei Fuochi* phenomenon demonstrated the importance of developing a rigorous interdisciplinary methodology, which had to be shared among the various institutional actors involved in addressing the problem, and the related need to avoid fragmented, compartmentalised analyses of the phenomenon and the actions to tackle it (p. 8 of the report).
It appears from the report that statistical data on the illegal burning of waste had been collected from 2012 onwards. According to that data, 3,984 fire-fighting operations were conducted in 2012 to extinguish blazes caused by the illegal burning of waste in the provinces of Naples and Caserta, compared with 2,835 in 2013, 2,531 in 2014, 2,026 in 2015, 1,814 in 2016, and 1,442 in 2017.
The Committee also drew attention to the important and meritorious role played by the NGOs and community associations which denounced and raised awareness of the illegal conduct at issue and the damage to the environment and human health.
74. On 28 February 2018 the sixth parliamentary commission of inquiry published a report focused on the Campania region. The report included a chapter on what it referred to as the new *Terra dei Fuochi* emergency. It explained that the choice of the term "new" reflected the fact that information continued to emerge about the pollution phenomenon at issue, which was constantly changing. For example, information was obtained from the results of testing activities, or investigations unearthed new sites used for burying or dumping waste, thus renewing the "emergency" character of the problem, which appeared never to end. The commission highlighted the complexity of the phenomenon, which had been affecting areas of Campania for a long period of time. It stressed the difficulty in capturing such complexity in a unitary and complete description, against a backdrop of

multiple sources and fragmented and incomplete information. Moreover, the illegal conduct giving rise to the phenomenon could not be attributed to a single source. As an example, the commission noted that investigations into the burying of waste revealed the involvement of organised criminal groups, but also unrelated causes.

Dealing with the problem would involve different entities of the State apparatus and a combination of technical, scientific, administrative and judicial competencies.

The Commission considered that the adoption of Decree-Law no. 136 of 2013 and Law no. 6 of 2014 indicated a welcome "mobilisation" on the authorities' part, with a specific focus on the *Terra dei Fuochi* problem and an attempt to address the different aspects that made up this phenomenon.

The work carried out by the Working Group on mapping and testing for contaminants on agricultural land (see paragraph 111 below) was praised, in that it provided an official snapshot of the areas affected by the pollution phenomenon at issue, and identified those areas which were not suitable for agricultural production. At the same time, the Commission expressed concerns about the fact that the Working Group had been obliged, through no fault of its own, to conduct a concrete assessment of the contamination (with a view to classifying the inspected areas of land on the basis of their pollution levels) without any regulation setting out the relevant parameters and procedures for agricultural land. The enactment of such an instrument had in fact been provided for by law in 2006 (see paragraph 123 below) and reiterated once again in 2014 (see paragraph 106 below). In the Commission's opinion, this could have led to the risk being underestimated in certain cases and overestimated in others. The report also noted that the Working Group had still not completed its tasks, as the identification of plots of land belonging to presumed risk category 2d (land surrounding waste disposal/treatment facilities, landfills, and areas affected by burning of waste) was still in progress. Another cause for concern in addressing the *Terra dei Fuochi* problem was the condition of financial hardship affecting many of the municipalities in the Naples and Caserta provinces. In the Commission's view, this was making it difficult for some municipalities to enforce the prohibition of agricultural activities imposed as a result of the WG's investigation activities.

In order for prevention and protection measures to be effective, monitoring efforts and financial commitments had to be extended to all areas affected by illegal waste disposal, and not be focused only on those identified as agricultural land.

With regard to progress in decontamination activities in the Campania Region, the Commission noted that, despite a large amount of information submitted to it by various sources, there were gaps concerning fundamental aspects. This made it difficult for the Commission to obtain an objective and up-to-date picture of the situation (p. 641 of the report). The Commission pointed out that the information it received was often fragmented and outdated, and was submitted by different entities with overlapping responsibilities, whose spheres of action was at times not entirely clear.

The Commission further noted, with regard to the decontamination of sites identified as being "of national interest" (see paragraph 120 below), progress was very slow: more than fifteen years after the identification of such sites, and despite an agreement signed in 2007 that was supposed to give impetus to the decontamination activities, the initial classification work had either still not begun or, where decontamination projects had already been defined, certain had not been implemented or had not been completed. According to the Commission, despite the existence of extremely serious

situations requiring rapid, efficient and effective action, efforts were slowed down by administrative disputes and difficult relations between the different entities responsible for decontamination.
As regards the management of the waste cycle, the Commission found that there were still insufficient composting facilities in the region. While highlighting positive developments in the separate collection of household waste (*raccolta differenziata*), it highlighted a number of shortcomings affecting the 2016 Regional waste management plan. In this latter connection, it mentioned, among other aspects, the underestimation of waste disposal and incineration needs, needs which could not be met by the existing facilities. The Commission noted that measures on management of the urban waste cycle as provided for in the regional law had still not been implemented. It further noted the failure to comply with the CJEU judgment issued in 2015, which had cost Italy, at the time of writing, approximately EUR 130 million euros due to the imposition of a daily penalty).
Concerning the management of special waste, it noted that the problem concerning waste bales was emblematic of the emergency situation affecting the region, which would persist, in the Commission's view, until such time as the 5,300,000 tonnes of waste packed in bales and stored in different sites had been permanently removed. While the Commission noted the importance of the enactment of Law Decree no. 185 of 15 November 2015, which provided for the adoption of "extraordinary measures" for the removal of waste bales (see paragraph 59 above) and acknowledged some efforts made by the Campania Region, it concluded that the situation remained critical and the number of eco-bales that had actually been removed (104,650 tonnes) appeared to be negligible compared to the number being stored in different sites.
The Commission highlighted particular difficulties in obtaining updated information from the Campania regional authorities, not only concerning decontamination but also concerning management of the waste cycle itself. The Commission added, as an overarching consideration, that the fragmented and at times inconsistent nature of the information submitted to it stemmed, amongst other sources, from a lack of coordination between the different entities involved and this, in turn, stemmed from the absence of a legal and regulatory framework assigning specific responsibilities and powers to different entities and regulating their interactions (p. 642 of the report).
Turning to the criminal-law framework applicable to environmental offences, the Commission pointed out that the complexity of building a case (*accertamento*) concerning environmental offences, together with the short statutory limitation periods, were elements that hindered successful criminal proceedings in this sphere. It would be necessary, in the Commission's view, to verify over time whether the newly introduced environmental offences (see paragraph 133 below) would be more effective. It underlined that the criminal proceedings which were ongoing at the time of its investigation were based on the legal framework predating the new offences. The Commission emphasised the importance of political responsibility in addressing the conduct at issue, something which went beyond findings of criminal responsibility.
The Commission then examined the introduction of the crime of illegal incineration of waste and considered that, despite the legislature's intention to combat a very serious phenomenon, in its practical implementation it had proven less useful than expected. This was due in part to what the Commission described as flaws in the manner in which the provision was worded. The Commission

pointed to the difficulties in identifying those responsible for the offence, a cause for concern which had surfaced in all the statements by the public prosecutors heard by the commission. The Naples Public Prosecutor's Office had pointed out that analysis of the data on the entries in the register of offence reports up to 31 December 2016, showed that in approximately 95 per cent of cases the perpetrators of waste burning remained unknown, and the perpetrators were identified in only slightly more than 5 per cent of cases (p. 211).

75. In August 2018 the Working Group (see paragraph 111 below) issued a progress report on the mapping of agricultural land as provided for in Decree-Law no. 136 of 2013. It focused on a part of the Campania Region known as "Area Vasta Bortolotto-Sogeri", which was part of the territory that had been identified as belonging to the 2c "presumed risk" category (see paragraph 112 below). According to the report, investigations had been conducted on a possible correlation between soil pollution and the quality of the water used for irrigation purposes. It referred to a finding that leachate from two landfills which had been shut down for years but had not been properly managed after closure had percolated into the groundwater and into adjacent agricultural fields. The necessary preparatory work for rendering the sites safe was in progress. When the report was drafted, an inter-ministerial Decree was in the process of adoption, in order to prohibit agriculture and grazing within a 20-metre radius from the leachate collection channel and from certain identified portions of the land. According to the report, a similar Decree was in the process of being adopted in connection with another part of the region known as "Area Vasta Lo Uttaro".

76. In October 2018 Invitalia published its "Operational Plan" setting out the terms of its assistance to the Campania Region in speeding up the reclamation process under the PRB, as per the agreement concluded on 2 October 2017 (see paragraph 70 above). The Operational Plan lists a number of hurdles that the Campania Region encountered at the planning stage (fragmented governance at the regional level; difficulties in assigning responsibilities among the various administrative entities and in determining budgets for the activities, difficulties concerning specific areas and overlaps with other entities involved in the process). It stated that the "technical and administrative complexity" involved did not enable it to forecast future activities or allow for forward planning. The activities envisaged included a number of projects for reclaiming sites and ensuring their safety. The vast majority of such projects, however, concerned what was referred to as the "classification" of sites. Invitalia committed to assisting the Region in "planning and programming the activities necessary for the launching of tenders", while recognising that the complexity of the different activities meant that many public tender procedures would have to be launched, with repercussions for the time-frames for concrete enactment of the measures and the risk of litigation, which could also slow down the process considerably.

77. On 31 October 2018 the Director General for the Waste Cycle of the Campania Region and the Director General for Waste and Pollution of the Ministry of the Environment published a joint progress report on the Regional Plan for the Management of Urban Waste (see paragraph 67 above), including the Extraordinary Programme for the removal of eco-bales (see 59 above).

The report provided an overview of the legislation and other instruments introduced to tackle the deficiencies in waste management in the region since 2015. It highlighted the enactment of the 2016 Regional Law on the waste cycle (see paragraph 61 above) which placed Campania at the forefront of national efforts to address this problem.

The Extraordinary Programme for the removal of waste bales was being implemented and was expected to allow for the removal of 961,934 tonnes of waste. For the remaining 4,700,000 tonnes, the programme envisaged, amongst other things, the use of waste bales for fuel production. It was further noted that in September 2016 60 million euros had been allocated for the disposal of waste stored in bales. A further 294 million euros were allocated in December 2016 specifically for actions to be implemented in what the report refers to as the municipalities falling within the *Terra dei Fuochi*. While acknowledging the delays affecting the programme's implementation, the report stressed the Region's commitment to it.

The report also provided an update on the capacity of different landfills and the amount of waste treated by them. It drew attention to the technological modernisation efforts concerning three shredding and waste packaging plants, which were underway, and which would lead to a significant reduction in the quantity of waste sent to landfills.

As to composting, under the Regional plan EUR 200 million had been allocated to a programme for the construction of new composting plants. The report reviewed the progress made in this sphere and noted that the processing capacity for composting had increased considerably since 2017. Moreover, a new plant for the treatment of the organic fraction of municipal solid waste had come into operation in 2017 in the Giugliano municipality. The remaining plant deficit was being addressed, *inter alia*, by the provision of finance for additional public plants.

78. On 19 November 2018 a "Protocol of Understanding for the Experimental Implementation of the Action Plan to combat the incineration of waste" was signed between the Campania Region and different Government ministers (the Prime Minister, the Ministers of the Environment, the Interior, Economic Development, Defence, Health and Justice, and the Minister for Southern Italy).

The preamble to the Protocol states that the need for a new agreement, bringing together various ministries rather than authorities at the regional level, had emerged against the backdrop of a significant increase in fires in the months preceding its drafting. The text cited a report issued on 17 January 2018 by the sixth parliamentary commission of inquiry, which pointed out that the problem of waste incineration concerned not only a number of isolated incidents but, rather, amounted to a problem of national concern, given its correlation with the shortcomings in the waste management cycle. Hence the need for an innovative approach and a new, coordinated, action plan, the effectiveness of which was to be "tested" (*sperimentato*) on the territory of the Campania Region. In order to address the problem successfully, a preliminary step would be to establish an extensive monitoring network in order to study the correlations between different kinds of illegal waste management practices. Furthermore, in order to combat the phenomenon, the allocation of competencies to the different administrative entities involved had to be identified and coordinated. Three overarching "areas" of intervention were identified: (1) actions for health protection; (2) actions for environmental protection; and (3) actions for patrolling and monitoring the territory with a view to preventing fires.

With regard to (1) health, the plan envisaged the creation of a unified, updated information system containing, on the one hand, data and statistics on medical conditions (in particular mortality and incidence rates of tumours) affecting the population living in the areas concerned by the burning and dumping of waste and, on the other hand, epidemiological studies. Sub-objectives under this heading included: creating a publicly accessible database, publishing periodic reports aimed at

informing the population and health authorities; assessing the incidence of tumours; commencing studies on the possible causes of such tumours; creating maps to evaluate the incidence and prevalence of tumours in different areas, and launching primary and secondary prevention campaigns.

The Protocol further envisaged increased air-quality monitoring, via the purchase of two sensors for assessing air quality, to be used in the event of fires. The plan also strengthened cooperation with the Fire Corps (*Corpo Nazionale dei Vigili del Fuoco*) for the detection of radioactivity.

With regard to (2) actions for environmental protection, two key aspects concerned fires reported within the so-called "Sites of national interest" (see paragraph 120 below). In the event of a fire in such areas, the Ministry of the Environment and the ISPRA were to perform an environmental damage assessment within seven days and identify the measures to be taken, a list of which was to be forwarded to the responsible entity within 45 days. If the responsible entity failed to comply or could not be identified, the Ministry of the Environment and SOGESID (Società di Gestione di Impianti Idrici – a State-owned company that manages water-treatment plants) would step in. A similar but not identical procedure also applied to sites that were not part of the SIN.

The Protocol further envisaged the conclusion of a State-Region agreement on air-quality monitoring in the Campania Region.

As to the removal of abandoned waste and burned waste, the protocol reiterated that the Region was required to carry out clean-up activities when individual Municipalities did not have the means to do so.

The section on monitoring and patrolling (3) contained the largest number of actions. First of all, it envisaged an increase in the number of police officers and army personnel for patrolling purposes, coupled with a strengthening of the monitoring activities by the Fire Corps and of their involvement in risk-assessment operations. In particular, the Fire Corps were to be entrusted with the task of developing "dynamic maps" of blazes, updating the reconnaissance of areas to be investigated and of sites affected by waste abandonment and burning, as well as of existing waste-treatment facilities, and also with the creation of a database of existing facilities. The plan further envisaged the development of fire-safety guidelines in waste collection and management sites, and guidelines for conducting checks on the authorisation procedures for operating such plants.

The plan further envisaged the establishment of an enhanced monitoring network by means of surveillance cameras, drones and other devices, as well as the establishment of a "permanent control centre". Updating the Fire Corps' public portal, which contains information on fires and on the activities carried out by firefighters, was also envisaged, as was improvement of the "Report a Fire" mobile application developed by SMA Campania.

The Protocol also contained proposals concerning information and awareness-raising campaigns targeted at companies and citizens. It outlined in some detail the proposed campaigns to be launched by the different Ministries. For example, the Ministry of the Environment committed to launching awareness-raising campaigns for citizens on the steps to be taken if they saw burning waste, and what they could do to prevent fires.

As envisaged by the Protocol, a Coordination Unit was set up.

79. On 30 December 2018 Law no. 145 (the "2019 Budget Law") was passed. This provided for the adoption of a National Reclamation Programme by the Minister of the Environment. As envisaged,

a task force composed by Ministry of the Environment and ISPRA staff was set up shortly thereafter for the purposes of defining standardised and nationally applicable criteria for ranking contaminated sites, in order to prioritise decontamination activities.

80. On 31 December 2018 the Director General of the Campania Region's Health Directorate submitted a report to the Ministry of Health on the status of the various projects and the use of funds allocated in connection with the *Terra dei Fuochi* phenomenon. The report primarily focused on the progress made in implementing the health-related provisions of Law no. 6 of 2014 as of June 2016 (see paragraph 107 above).

It noted that an IT platform to monitor and manage cancer screening by all local health authorities was up and running.

According to the report, considerable progress had been made in strengthening cancer screening in the region. A number of local health authorities had set up cancer-prevention clinics and opened new screening centres, including walk-in clinics and laboratories. Some authorities had implemented itinerant screening initiatives and others had extended programmes to weekends in order to increase participation. The report provided evidence of other concrete measures taken by specific local health authorities with the funding received, including the hiring of additional medical and technical staff and the purchase of diagnostic and laboratory equipment. The report also provided an overview of the different awareness-raising activities carried out in schools, factories, community centres, pharmacies and churches in different municipalities in relation to cancer screening.

With specific regard to what the report referred to as the *Terra dei Fuochi* municipalities, it noted that specific measures had been introduced to ensure preferential and simplified access to cancer screening programmes and that individuals taking part in such programmes were exempt from all charges which would have applied under the national health system. It was reiterated that these municipalities had received specific funding in order to implement these measures.

In addition, measures had been introduced for certain other 'priority diseases', such as respiratory diseases. In particular, new outpatient clinics were being set up within certain local health authorities. In the sphere of maternal and child health, the report stated that a Register of Congenital Malformations had become operational at the regional level. In a number of municipalities, new prenatal diagnosis centres had been set up and contained with the equipment necessary to measure pollutants in bodily fluids.

As regards epidemiological surveillance measures, two new studies investigating health and environmental factors from different perspectives had been launched. Measures had also been taken to strengthen epidemiological surveillance through tumour registers.

81. On 22 March 2019 the Campania Regional Council published the progress report on the implementation status of the Regional Decontamination Plan for 2018. In particular, this report states that no procedure to carry out an environmental investigation had been launched in respect of 75% of the 3,479 sites identified in the 2013 PRB. For 13% of the sites, such a procedure had been launched, in 4% the risk-assessment phase had begun, and in 3.5% of the sites decontamination activities had begun, through the preparation or implementation of a decontamination project. It also noted that additional sites were included in the plan between 2013 and 2018, leading to a total of 4,692 registered sites; as per the same report, for 77% of those sites no procedure for environmental

investigation or risk analysis had been launched. The report also stated that clean-up activities had been concluded in respect of 3% of the sites.

82. On 28 May 2019 the Minister of Health issued a Decree establishing a "National Reference Centre for the analysis and study of correlations between the environment, animals, and humans" under the auspices of the IZSM. The Centre's mandate involved setting up a network of focal points within the different zooprophylactic institutes for the purposes of coordinating the activities in the sphere of food safety; providing technical and scientific assistance to the Minister of Health; organising training courses for national health service staff and other employees of relevant local authorities; carrying out planning activities, scientific research, risk assessments, epidemiological monitoring and analysis, with a view to investigating the interactions between contaminants and food products and developing targeted actions.

83. In June 2019 the National Health Institute published an update to the "*Sentieri*" project (see paragraph 57 above). In the section concerning the countryside around Aversa and the Domizio-Phlegrean coast, in which multiple illegal waste dumping sites had been detected and which encompassed thirty-eight of the municipalities listed in the inter-ministerial directive of 23 December 2013 (see Annex II), the study reported an excess general mortality rate for both genders for all underlying causes of death, as compared to the regional average. This research further highlighted, *inter alia*, an excess mortality rate for certain diseases in both genders (stomach cancer, colorectal cancer, liver cancer, respiratory diseases), in men (lung cancer, bladder cancer, asthma) and in women (breast cancer). The report's conclusions pointed out, *inter alia*, that:

"Across the entire area, an excess of the diseases found in previous observation periods in other independent studies was confirmed; many of these diseases have several different risk factors, among which the most recent international literature identifies exposure to inadequate disposal of urban and hazardous waste or contaminants that are present in certain parts of the area under scrutiny."

The section concerning the Vesuvian Coastline (*Area Litorale Vesuviana*), encompassing the municipalities of Boscoreale, Boscotrecase, Castellammare di Stabia, Pompei, Portici, San Giorgio a Cremano, Terzigno, Torre Annunziata and Torre del Greco, noted, *inter alia*, that:

"Excesses in liver cancer and other hepatic diseases in both genders may be in part due to exposure to substances released by uncontrolled and/or illegal waste disposal sites present in the area. Exposure to atmospheric contaminants may have played a causal or co-causal role in determining the excesses observed as regards respiratory diseases, diseases which are multifactorial and for which active and passive smoking, and alcohol consumption are important risk factors. Mortality for asthma, as well as mortality for breast cancer and cervical cancer require reflection, not only on the possible role of exposure to environmental pollutants present in the area, but also for with regard to the implementation of diagnostic and therapeutic measures. The collection of data on contamination of the different environmental matrices, with a view to determining the resident population's past and present exposure, will provide useful elements for the interpretation of the reported health data. Given the surface of the area at issue, it is recommended that ... data are collected via epidemiological studies focused on small areas. The integration of environmental and health data may provide useful indications on the sub-areas in which to prioritise decontamination efforts and the sub-groups of the population for whom to prioritise prevention and treatment."

Recommendations were made to the effect that decontamination activities had to be implemented as a matter of urgency and immediate steps had to be taken to stop illegal waste-disposal practices.
84. On 14 June 2019 the Delegated Official published a report covering activities aimed at tackling the incineration of waste from January to May 2019.
It began by pointing out that 1,511 fire-fighting operations had been conducted in 2018 to extinguish blazes caused by the illegal burning of waste in the provinces of Naples and Caserta, which marked a decrease when compared to the previous year.
During the reporting period, reports of fires increased by 24% when compared to the preceding six months. The majority of fires concerned solid urban waste (613 fires). In the words of the Delegated Official, "this is essentially due to the difficulties encountered by some municipalities in the management of urban waste, against a background of shortcomings in the waste cycle which, over the past year, have been particularly evident".
Out of the reported fires, 84 concerned plastic materials, textiles, rubber, leather and car tyres. The author emphasised much abandonment and burning of waste continued to originate in companies which disposed of their industrial waste illegally. One positive development was the absence of reported fires in waste storage and treatment plants.
The report described the interaction between the monitoring activities carried out by the Army, the national police and local police forces, including joint operations coordinated by the Delegated Official. As a result of such joint operations, in 2018 there was a 40% increase in enforcement actions (seizure of companies and vehicles, lodging of criminal complaints, issuing of administrative fines) as well as a 37% increase in arrests (30 people in 2019). In the period at issue 155 army officers had been specifically deployed for the monitoring of waste storage and disposal facilities.
The report also contained an update on initiatives to combat the incineration of car tyres and on implementation of the "Ecopneus" project, launched jointly in 2013 by the Ministry of the Environment, the Delegated Official, the Naples and Caserta prefectures, and Ecopneus (a not-for-profit company which recycled car tyres).
Given that the report was published just before the summer months, the Delegated Official urged municipalities to increase their efforts to remove easily combustible abandoned waste which could produce toxic fumes when burned, "while acknowledging the difficulties [for the municipalities] in obtaining funding" for such purposes.
The report praised the work of law-enforcement officers, and in particular the local (municipal) police, but at the same time highlighted with concern that "severe staff shortages" were hampering local police efforts.
In his conclusion, the Delegated Official stated that, although the data presented in the report showed that certain kinds of illegal conduct had decreased, "phenomena that may generate environmental risks" were still present in what he referred to as the *Terra dei Fuochi* area.
The problem of burning waste, in particular, could not, in the Delegated Official's view, be solved uniquely by monitoring, investigative, and enforcement measures. It was indispensable that action be taken in the area of waste-cycle management, shortcomings in which were identified as one of the key causes of fires.

The Delegated Official further recommended an administrative reorganisation, so that the removal of abandoned waste was not the sole responsibility of individual municipalities but would instead be shared with other administrative entities.

85. On 4 April 2019 the Italian Government submitted information to the Council of Europe's Committee of Ministers in connection with the execution of the judgment in *Di Sarno and Others v. Italy* (no. 30765/08, 10 January 2012), for consideration at the Committee of Ministers' 1348th meeting in June 2019. The document reviewed the legislative framework introduced to address the shortcomings in waste collection, treatment and disposal in the Campania Region. It described the objectives to be achieved by 2020 as set out in the 2016 Regional plan for the management of urban waste (see paragraph 67 above), with a view to complying with the 2015 CJEU judgment. Concerning the management of special waste, the Government referred to the findings of the sixth parliamentary commission of inquiry in its 2018 report on Campania (see paragraph 74 above) and drew attention to the actions envisaged to deal with the problem of eco-bales. In a section entitled "impact of the measures adopted", the Government further highlighted that between 2009 and 2017 the percentage of sorted waste at the household level had increased from 29% to 53%.

86. On 24 April 2019 the Campania Regional Council adopted Resolution no. 180 of 2019, on "Environmental monitoring and health assessment of the population living in risk areas". This contained what was referred to as a "new programme of activities" to be carried out between 2019-2021 in the context of implementing the 2018 Protocol of Understanding for "Experimental Implementation" of the Action Plan (see paragraph 78 above).

Four key areas of activity were identified: "the environment", "health", "applied research", and "communication".

Under the "environment" heading, the first action was to entail a "follow-up" to the *Campania Trasparente* monitoring activities (see paragraph 55 above). A first phase would involve a study of the results of the different monitoring efforts (the IZSM with the *Campania Trasparente* programme, ARPAC sampling and monitoring, and other studies on environmental pollution in the area) in order to plan further targeted sampling and analysis, to be carried out not only in agricultural contexts but also in urban settings. As to air sampling, the starting point was to be the elaboration of data gathered from the 50 air-sampling stations set up under the *Campania Trasparente* programme and the 26 stations set up by the ARPAC. As to water sampling, 1,000 groundwater samples would be taken and examined in collaboration with the ARPAC, using the latter's 298 existing groundwater sampling stations. The sampling activities would contribute to defining areas of concern (with a "high environmental pressure index") in terms of air and water quality.

Another project envisaged the establishment of a Unified Registry of Water Services (*Catasto unico delle Utenze Idriche*). This arose out of the need to register all water sources in the region, including private wells that were not registered and were used without official authorisation. The plan also entailed the development of Guidelines for the use and monitoring of groundwater.

Under the "health" heading the document listed the three new studies:

SPEM ("Exposure study on the population affected by pathologies"), an observational epidemiological study aimed at investigating possible correlation between environmental pollution and certain health conditions (bladder cancer, colorectal cancer, cardiovascular disease and type 2 diabetes). The study would investigate the risk of contracting such diseases in relation to exposure

to certain environmental pollutants, by comparing the levels of such pollutants in the bodily fluids of residents of certain areas with these diseases and healthy subjects. The relevant contaminants include dioxins and dioxin-like compounds, polycyclic aromatic hydrocarbons, and heavy metals.
SPEL ("Exposure study for occupational diseases"), a study that was to investigate the exposure of certain categories of workers to chemical agents (i.e. firefighters, waste treatment facility employees, tannery workers...) through the analysis of biomarkers, in order to evaluate the risks to which they were exposed.
GEMMA, a study aimed at investigating how different factors, including environmental ones, could influence the development of autism spectrum disorders.
A follow-up to the "SPES" study (see paragraph 64 above). Its objective was to monitor, over time (20 years) the health of the individuals who had participated in the SPES study in 2016-2017.
The "health" component of the document also envisaged the launch of a study to develop models for early cancer diagnosis. It also included a project, in collaboration with general practitioners, aimed at strengthening primary and secondary prevention of cancer and diagnostic and care pathways in connection with diseases linked to exposure to pollutants. It further envisaged the strengthening of oncological screening programmes and the development of an "Atlas of mortality for the Campania Region".
Communication campaigns were envisaged in order to raise awareness among the population about health risks associated with age, occupation, lifestyle, and exposure to pollution.
Under the "applied research" heading the programme envisaged research on procedures to remove pollutants from groundwater.
87. On 1 June 2019, Ministerial Decree No. 46 introduced a regulation on decontamination, reclamation and security measures concerning agricultural and grazing land ("*Regolamento relativo agli interventi di bonifica, di ripristino ambientale e di messa in sicurezza, d'emergenza, operativa e permanente, delle aree destinate alla produzione agricola e all'allevamento*"), as required by Article 241 of Legislative Decree No. 152 of 3 April 2006 (see paragraph 123 above). The regulation provided, *inter alia*, for procedures for the environmental characterisation of contaminated areas, set out procedures for performing risk assessments, and identified methods and procedures for clean-up operations, and measures to be adopted in order to ensure food safety.
88. On 7 August 2019 the Coordination Unit set up under the Protocol of Understanding for the "Experimental Implementation" of the *Terra dei Fuochi* Action Plan (see paragraph 78 above) published a Periodic Report, covering the three months prior to its publication.
89. A specific working group had been set up within the Coordination Unit to review the existing databases which collected data on the phenomenon at issue and to explore the possibility of integrating them. The report stated that progress was being made towards ensuring the compatibility the information platform, provided for in the 2016 Action Plan (see paragraph 66 above), with other information systems, so that it could receive data from the ARPAC, the Fire Corps, and other users. SMA Campania was carrying out surveys to identify areas affected by illegal burning and dumping of waste in the 90 *Terra dei Fuochi* municipalities and feeding the information into the I.TER platform. SMA Campania had further completed the georeferencing of sites affected by the illegal burning of waste and had fed this information into the I.TER platform.

90. According to the report, all the tumour registries in the Campania Region had received national accreditation.

91. As to air-quality monitoring, contracts for the purchase of the air sensors indicated in the Protocol of Understanding (see paragraph 78 above) were being concluded. A draft of the State-Region Agreement on air-quality monitoring in Campania had been sent by the Campania Region to the Ministry of the Environment, which had proposed amendments. The Campania Region was in the process of evaluating the amended text.

92. As regards the removal of illegally abandoned and incinerated waste at Municipality level, procurement activities were in the process of being carried out and members of the coordination unit had met with representatives from the Campania Region and the Ministry of the Environment to develop strategies to support municipalities in clean-up activities. The Coordination Unit was also in the process of assessing the problem of waste abandonment with a view to developing proposals to simplify removal efforts by municipalities.

For the period in question, which was referred to as the "Summer Season", there had been a considerable increase in the deployment of police, firefighting, and army personnel for monitoring purposes. Moreover, it emerges that monitoring of specific 'sensitive' sites identified by the Campania region (landfills, waste-bale storage facilities, waste storage facilities) had been carried out. Monitoring activities carried out by army personnel via the use of drones continued. As to the purchase of equipment listed in the plan (additional drones and security cameras), public tenders were in the process of completion. The Naples and Caserta prefectures had set up a working group to monitor waste storage and treatment sites identified by the Campania Region. An agreement had been concluded with the Italian Airforce with a view to using military equipment and drawing on its expertise to strengthen mapping, surveillance and monitoring efforts in connection with illegal dumping and incineration practices in the so-called *Terra dei fuochi* area and such efforts had begun. The report also provided statistics on the number of illegal incineration incidents reported, which had increased slightly in the first five months of 2019, and the number of interventions by firefighters to extinguish them. The database of reported fires requiring firefighting interventions, which had been set up by the Fire Corps in 2012, was being constantly updated.

The Coordination Unit stressed that one of the factors contributing to the illegal incineration of waste could be found in the shortcomings affecting the waste cycle. Although it stated it did not have specific expertise on the subject, it expressed its availability to cooperate with local entities involved in waste management.

Emphasis was placed on the role of the "counterfeiting industry" in contributing to illegal waste management practices. In order to address this, awareness-raising campaigns and activities on counterfeiting were being carried out.

93. On 19 September 2019 the ISPRA submitted its final report on the criteria for ranking the contaminated sites in order to prioritise decontamination activities, with a view to the adoption of a National Decontamination Programme. Following a survey of the criteria employed at regional level in the context of regional decontamination plans, the report listed some of the factors on which such prioritisation could be based. These included: the surface area affected, the dangerousness of the contaminants at issue, the quantity of the contaminants, the source of the contaminants, what has been contaminated, (that is, water or soil), and distance from residential areas.

94. On 30 October 2019 the General Directorate on Waste and Pollution of the Ministry of the Environment issued a progress report on measures taken in the first semester of 2019 as regards the Campania Region in order to comply with the 2015 CJEU judgment. It noted that composting capacity had increased and public tender procedures had been launched with a view to building new facilities. Progress had also been made on increasing incineration capacity and a public contract had been awarded for the creation of a new facility to dispose of waste bales via the production of solid secondary fuel. It was noted that the number of waste bales disposed of had increased by comparison with the same period in the previous year, with 170,000 tonnes of bales having been removed. The report highlighted the imminent reopening of two sectors of the S. Arcangelo Trimonte landfill, which would increase landfill capacity, and the launch of an environmental impact assessment of a landfill mining project in the San Tammaro municipality.

95. On 15 December 2019 the results of a pilot study entitled "Blood screening for heavy metals and organic pollutants in cancer patients exposed to toxic waste in Southern Italy" were published in the Journal of Cellular Physiology. The study reiterated that the eastern part of the Campania Region had been characterised by documented illegal dumping and burning of waste, and provided a review of previous studies suggesting links between exposure to pollutants and the health of the population living in the area. In particular, studies showed that exposure to toxic waste was being associated with increased cancer development and mortality in these areas, although a causal link had not yet been established. It was also pointed out that a number of chemical and physical agents had been identified by the International Agency for Research on Cancer as "certainly carcinogenic to humans" and these included dioxins, benzene, furans, persistent organic pollutants, and heavy metals.

In the pilot study, the authors evaluated the levels of toxic heavy metals and persistent organic pollutants ("POPs") in the blood of 95 patients with different cancer types residing in different municipalities in the Naples and Caserta provinces and in 27 healthy individuals. While they did not find any significant correlation between the blood levels of POPs and the provenance of the patients, they did observe high blood concentrations of heavy metals in some municipalities, including Giugliano in Campania, where many illegal waste disposal sites had previously been documented. The results showed that patients with different cancer types from Giugliano in Campania had higher blood levels of heavy metals than the healthy control patients. Using the example of Giugliano in Campania, the authors pointed out that, despite the small samples used, the observed effect was sufficiently high to reach statistical significance. Despite acknowledging some limitations of the exploratory study, the authors' preliminary observations led them to encourage further research to assess the association between exposure to hazardous waste and an increased risk of cancer.

96. In January 2020 the "Atlas of mortality for the Campania Region" (see paragraph 85 above) was published. The Atlas shows an overview of mortality through comparisons with national data and with intra-regional areas. Both overall and cause-specific mortality data for the period 2006-2014 referred to people residing in Campania Region were analysed.

97. On 5 August 2020 an agreement was signed between the Ministry of the Environment, the Delegated Official and the municipalities of Caivano and Giugliano in Campania. Its objective was to provide support to the two municipalities in addressing the problem of abandoned waste and

illegal incineration, through fire prevention, the strengthening of waste collection, recycling and recovery activities, enhanced territorial supervision, information campaigns and involvement of local communities. The programme sought to test a model which, if successful, could be adopted in other municipalities in the "*Terra dei Fuochi* area". The Ministry also undertook to provide surveillance cameras in order to ensure continuous monitoring of dumping sites that had been cleaned up.

98. In December 2020 the Working Group established under the 2016 agreement between the National Health Institute and the Northern Naples Prosecution Service (see paragraph 63 above) published its final report.

Its authors noted that uncontrolled and illegal waste management practices had been occurring in the study area since the late 1980s and that no significant clean-up and remedial activities had been carried out by the time that the investigation began.

The study area consisted of thirty-eight municipalities under the jurisdiction of the Northern Naples prosecution service, with a total surface of 426 sq. km. It was characterised by the presence of 2,767 identified waste disposal sites (both legal and illegal), 653 of which had been affected by illegal incineration of waste. In the municipalities under scrutiny, 37% of the population resided within 100 metres of one or more of these sites. According to the authors, this led in many cases to multiple sources of exposure to substances dangerous to human health. The thirty-eight municipalities were classified according to an estimated risk of exposure to waste (named the "IRC" indicator or *indicatore rischio da rifiuti comunale*). Among the municipalities analysed in the study, Giugliano in Campania and Caivano were assigned the highest risk of exposure (IRC 4), and both municipalities were characterised by a large number of illegal waste disposal sites and reported fires. When compared to the reference population, both municipalities displayed, overall, an excess of pathologies. Across the entire area, and in single identified municipalities, the study found an excess of certain health conditions in the adult population, for which exposure to contaminants emitted by waste sites could, according to the study authors, have been a cause or a contributing cause. Municipalities with a high IRC (4 and 5) were found to have a significantly higher incidence of breast cancer and hospitalisations for asthma. As to municipalities in categories 3, 4, and 5, the study found a significantly higher incidence of preterm births; for those in category 4, there was, overall, a more significant incidence of children born with congenital malformations.

In the overall paediatric-adolescent population, no excesses were identified when compared to the population of the rest of the region, but some causes for concern emerged in respect of specific municipalities. This finding, according to the authors, was worthy of specific attention and required a further in-depth study, not only because it concerned a vulnerable part of the population, but because it could disclose what they referred to as "sentinel events" linked to environmental factors. The results of the study highlighted that waste disposal sites, and particularly illegal sites containing hazardous waste and combustion products, could have had an impact on the health of the study population in terms of causation or co-causation (*in termini di causalità e/o con-causalità*) in the emergence of specific diseases.

Given the findings of the study, the authors deemed it essential that the authorities put a stop to any illegal activity connected to the disposal of waste, proceeded swiftly with decontamination of sites affected by contaminants and surrounding areas, set up a permanent epidemiological surveillance

plan of the population, and implemented public-health actions in terms of prevention-diagnosis-care. It was proposed to extend the same study to all municipalities in the Naples and Caserta provinces (excluding the capitals, Naples and Caserta, as their demographic characteristics were not considered suitable for the study methodology), so as to have a sufficient number of municipalities not affected by dumping and burning of waste against which to draw comparisons.

99. On 4 January 2021 the Delegated Official published a report covering the second semester of the year 2020).

In May 2020 the Delegated Official had started planning the activities that were to be resumed after what was described as a long period of interruption due to the COVID-19 pandemic. He noted that while, as a result of COVID-related lockdown measures, illegal dumping and burning of waste had not increased, there were fears that the lifting of confinement measures would entail a considerable upsurge in such illegal conduct. The planned activities included: reinforced deployment of law-enforcement units on the ground, increased use of drones by law-enforcement agencies and of aerial surveys by the Customs Police (*Guardia di Finanza*), and an increased number of targeted checks on agricultural, industrial and commercial activities identified as being potentially associated with illegal waste disposal practices.

He also reviewed the concrete measures undertaken in May and June 2020 in terms of checks on tyre shops, tanneries, textile plants, and construction companies. 1,332 operations by law-enforcement units (from the army as well as police forces) had yielded positive results in terms of reports of illegal activity, seizures, arrests, and administrative fines. He concluded that these operations had a positive, albeit not decisive, impact on the number of reported blazes, when comparing data for the months of June 2020 (166 fires in the provinces of Naples and Caserta combined) and June 2019 (192 fires). He then reviewed concrete measures taken from July to December 2020, which replicated the previous set of measures, with an additional focus on the illegal disposal of urban waste rather than solely on waste from productive activities. In line with the Delegated Official's instructions to law-enforcement teams on the ground, fewer checks were performed on companies and more "physical patrols" of the territory had been carried out. This led to a positive outcome when comparing data for the months of December 2020 (58 fires in the provinces of Naples and Caserta combined) and December 2019 (133 fires). He further noted that 400 surveillance cameras were being distributed to municipalities.

He also reported on a meeting he had convened with representatives of all the *Terra dei Fuochi* municipalities to obtain information and, at the same time, to allow for exchanges between the municipalities. He stressed the importance of dialogue and collaboration with civil society and reported on meetings bringing together representatives of local environmental and citizens' associations, representatives from the Ministry of the Environment and local prefectures.

He commended the law-enforcement officers deployed on the territory for their commitment and efficiency, although they encountered hurdles in carrying out their activities. In particular, the Delegated Official noted that the patrols on the ground faced difficulties in catching perpetrators while they were committing the illegal activities. He pointed out that fixed surveillance cameras had their limitations and that the law-enforcement drones being used were not particularly adapted to the task (a runway was required for take-off and they did not have night vision).

He also pointed to the existence of what he called "serious systemic concerns" ("*forti criticità di sistema*") and stated (emphasis in the original):

"It appears evident that the excess of waste abandoned in the environment can be attributed, on the one hand, to unlawful conduct by the individuals who carry out these activities and those who profit from them; however, the starting point for the dumping of waste outside the lawful waste cycle stems from the shortcomings in the waste cycle itself, and in particular the absence of facilities. It is not surprising that the areas with the most significant number of fires (which are the epilogue to dumping) are those that are the least equipped with [appropriate] facilities .... In this connection, the entities responsible for the organisation of services related to the waste cycle, such as regions, ought to be urged to take action in exercising such functions ..., with particular reference to identifying and creating waste treatment facilities, in the absence of which a lasting solution to the dumping, abandonment and burning [of waste] will be impossible. ... More permanent solutions to address concerns such as the insufficient number of structures for the reception and treatment of waste can only be put in place via specific regulatory action (administrative or legislative)." (emphasis in the original).

In concluding his report, the Delegated Official noted with concern that the Campania Regional authorities displayed an uncooperative attitude, apparently set out in detail in a service report by the Army Commander responsible for monitoring activities in the *Terra dei Fuochi* area, attached to the report but not present in the case file. He noted numerous attempts to involve the regional administration and its in-house Company SMA Campania in his *Terra de Fuochi* Steering committee (*cabina di regia*) and in other activities, but to no avail.

100. On 20 March 2019 and 20 April 2021 the ARPAC published two Progress Reports, on the mapping of agricultural land and testing for contaminants, especially the sampling and testing of soil, water for irrigation purposes and vegetation.

According to these reports, direct investigations had been carried out on the ground between 2014 and 2020.

Out of the 240 hectares of agricultural land that were examined and tested, 67.15% were classified as Category A (of which 2.29% as Category A1), 12.49% as Category D, and 20.36% as Category B. It was specified that land classified under Category D requires decontamination and that 31.2% of land in the remaining categories required some form of environmental rehabilitation (*recupero ambientale*).

Eight municipalities in particular were found to have the largest surface areas classified as Category D: Villa Literno (CE), Caivano (NA), Acerra (NA), Succivo (NA), Santa Maria la Fossa (CE), Giugliano in Campania (NA), Saviano (NA) and San Gennaro Vesuviano (NA).

The report stated that examination and testing of parcels of land identified as belonging to presumed risk categories 5, 4, 3 and 2a (see paragraph 112 below) had been completed.

The ARPAC reiterated that it had completed the examination and testing of plots of land in the "*Area Vasta Bortolotto-Sogeri*" (see paragraph 75 above), and that the WG had issued its report on these activities, although it noted the related inter-ministerial decree formalising the Working Group's findings and the related restrictions on certain agricultural activities had still not been enacted. It had also completed the examination and testing of certain plots of land in the "*Area Vasta Lo Uttaro*" and had begun testing another group of plots of land.

101. On 23 April 2021 the Working Group published a progress report on the mapping of agricultural land as provided under Decree-Law no. 136 of 2013. According to the report, soil sampling had been carried out in certain land parcels in the so-called "*Area Vasta Lo Uttaro*". What emerged was a "diffuse presence of contaminants" including arsenic, cadmium, heavy hydrocarbons, and aromatic polycyclic hydrocarbons. The data had been transmitted to the relevant prosecution service, resulting in an investigation and the seizure of contaminated land and wells. The Working Group noted that, during its monthly monitoring activities of classified land had shown that seven plots of land were being used for food production despite the prohibition on doing so.

What still remained to be assessed was land that had been identified as belonging to presumed risk category 2b (land for which no data is available on soil pollution, but the orthophoto analysis revealed potential risk factors). An initial screening of the plots of land was underway in order to determine those that were to be considered at greater risk.

As regards land identified as belonging to the 2d risk category, namely areas surrounding waste disposal/treatment facilities, landfills, and areas affected by burning waste (see paragraph 112 below), the identification of the plots to be mapped and investigated had not yet begun when the report was completed.

According to the report, no activities whatsoever had been carried out as regards the two municipalities (Ercolano and Calvi Risorta) which had been added by the inter-ministerial Decree of 10 December 2015 (see paragraph 60 above).

The Working Group also highlighted some causes for concern. It stated that on 25 June 2019 the Working Group had asked the Ministry of the Environment to clarify whether, in view of the enactment of ministerial Decree no. 46 of 1 June 2019 introducing a regulation on decontamination, reclamation and security measures concerning agricultural and grazing land (see paragraph 87 above), the Working Group's classification of plots of land conducted to date had to be reviewed, and whether their scientific model could still be followed for the investigations currently underway, or whether a new method reflecting the procedures contained in the decree had to be followed. The Working Group's coordinator reiterated the request in July 2020. The Ministry of the Environment replied in September 2020. The report further highlighted the absence of ministerial decrees formalising the findings of the Working Group as regards plots of land in the "*Area Vasta Bortolotto-Sogeri*" and the first portion of the "*Area Vasta Lo Uttaro*" (see paragraph 100 above), and stated it had urged the Ministry of the Environment to proceed with their adoption.

RELEVANT LEGAL FRAMEWORK AND PRACTICE

I. domestic law and practice

A. The Italian Constitution

102. The Italian Constitution was amended by Law no. 1 of 11 February 2022 to include the protection of the environment among the fundamental values inspiring the exercise of public functions and limiting private activities. In particular, Article 9 of the Constitution now provides that the Republic shall safeguard the environment, biodiversity and ecosystems also in the interest of future generations. Article 41, as amended, establishes that private economic enterprise shall not be carried out in a manner that could be damaging to health or the environment.

B. Legislation concerning the *Terra dei Fuochi* phenomenon

103. Decree-Law no. 136 of 10 December 2013, converted into Law no. 6 of 2014 ("Legislative Decree no. 136 of 2013") introduced urgent measures to deal with environmental emergencies. In its preamble, the text considered, *inter alia*, the "critical environmental and health situation" affecting certain areas of the Campania region and the urgent need for more hard-hitting measures to combat the illegal incineration of waste, and to provide for the mapping of agricultural land and its decontamination, in the interests of the residents population's health, the environment and food production.
104. Section 1 § 1 instructed the competent authorities – the Council for Agricultural Research and Experimentation ("the CRA"), the Higher Institute for Environmental Protection and Research ("the ISPRA"), the National Health Institute and the ARPAC – to map the agricultural land in the Campania Region with a view to detecting the possible presence of contamination linked to the illegal dumping, burying and burning of waste.
105. Section 1 § 1 *bis* provided for the strengthening of epidemiological surveillance by instructing the National Health Institute to extend the "*Sentieri*" project (see paragraph 57 above) to the municipalities affected by illegal disposal of waste practices, as identified by the relevant inter-ministerial directives.
106. Section 2 § 4 *ter* provided that, in view also of the decontamination actions to be undertaken, the Minister of the Environment, with the Ministers of Health, Economic Development, and Agriculture, adopt, within ninety days of the Law's entry into force, a Regulation on decontamination, environmental reclamation, and safety measures in respect of areas given over to agricultural production (*Regolamento relativo agli interventi di bonifica, di ripristino ambientale e di messa in sicurezza, d'emergenza, operativa e permanente, delle aree destinate alla produzione agricola e all'allevamento*), as provided for in Legislative Decree no. 152 of 2006.
107. Section 2 § 4 *quater*, *sexies*, *septies*, and *octies* instructed the Campania Region, with the assistance of the National Health Institute, to define the medical testing and screening necessary to monitor the health of the population residing in the municipalities affected by illegal disposal of waste practices as identified by the relevant inter-ministerial directives.
108. Section 3 § 1 established the offence of illegally burning waste.
109. Section 3 § 2 permitted the prefects of provinces in the Campania Region to call on assistance from the armed forces for monitoring and security operations in connection with, *inter alia*, environmental crimes, until 14 December 2014.
110. Section 2-*bis* entrusted the Prefect of the Naples province with responsibility for coordinating activities to prevent the infiltration of organised criminal groups in procedures for awarding and performing public contracts and in outsourcing public services related to the monitoring and decontamination of polluted areas.
111. An inter-ministerial directive of 23 December 2013 established a working group ("the Working Group") to identify land that had been contaminated by illegal waste-disposal practices in the Campania Region, to draw up a scientific model for classifying the inspected areas of land on the basis of their pollution levels and, lastly, to prepare reports setting out the results of their investigations and their proposals as to the measures to be adopted. The Working Group was made up of the CRA, the ISPRA, the National Health Institute, the ARPAC, Campania regional bodies, the IZSM, the "*Istituto zooprofilattico sperimentale dell'Abruzzo e del Molise*" ("the IZSAM") and the Naples

Federico II University, and was initially coordinated by the "*Agenzia delle erogazioni in agricoltura*" ("the AGEA") and subsequently by the head of the Forestry Police (*Corpo forestale dello Stato*). The same directive listed fifty-seven municipalities in which investigations were to be carried out in. The inter-ministerial directives of 16 April 2014 and 10 December 2015 added, respectively, a further thirty-one and two municipalities to the list of municipalities placed under investigation (see the list in Annex II).

112. Various phases were envisaged in the context of the above-mentioned scientific model. The first phase consisted in identifying the contaminated sites by mapping the areas affected by incorrect use or use for inappropriate purposes of formally legal waste disposal sites, through the burying of waste and, lastly, by the illegal burning of waste. The map was to be based on the data available to the entities within the Working Group and other public entities, on reports gathered from the internet, on the AGEA's orthophoto series (for the period 1997-2011) and, as part of the "*Monitoraggio delle aree potenzialmente inquinate*" project ("the MIAPI"), on data obtained over the period 2010-2013 through aerial remote sensing (that is, various procedures and techniques for obtaining information from a distance about earthbound objects, using the properties of the electromagnetic waves emitted or reflected by these objects). The second phase involved the preparation, by the Working Group, of a classification index by level of risk, firstly with regard to agricultural products and, more generally, to the food chain, and, secondly, of the risk level posed by waste disposal and management sites (with particular regard to the level of danger posed by the waste, its quantity and the area covered by the sites). On this basis five "presumed risk" categories were developed (Category 5 – very high (additional evidence); Category 4 – very high; Category 3 – high; Category 2 – medium; Category 1 – low). Category 2 was divided into four sub-categories: 2a (land for which data on soil pollution exists and is below a certain threshold, but for which no additional indication of risk emerged from the historical orthophoto analysis); 2b (land for which no data is available on soil pollution, but the orthophoto analysis revealed potential risk); 2c (land in the so-called "*aree vaste*"); and 2d (land surrounding waste-disposal/treatment facilities, landfills, and areas affected by waste incineration.

113. Using these indexes, the Working Group was able to classify land according to five risk levels, which were then associated with the measures that the authorities were required to adopt.

114. In the last phases, the Working Group indicated the measures to be adopted in view of the identified risk level and, lastly, designed a specific monitoring programme for supervising both short-term and long-term decontamination programmes.

115. In practice, the Working Group, using this methodology, identified 14,301 plots of land (covering a total area of 7,359 ha), as being at risk; the list of those plots was published in ministerial decrees of 11 March 2014 (for fifty-seven municipalities) and of 12 February 2015 (thirty-one municipalities). Pending completion of the analysis of each plot, the ministerial decrees of 2014 and 2015 prohibited the sale of produce from any land with the highest risk level.

116. Following analysis of these plots, a classification index in four "final" risk categories was developed: Category A (land which may be used for agriculture/ food production, with sub-category A1 covering land which may be suitable for such purposes only following the removal of waste and analysis of soil sediment); Category B (agricultural land on which food production is allowed under certain conditions, namely that fruit and vegetables can be grown, but certification must be produced attesting to their conformity with food safety regulations before they are put on the

market); Category C (crops may be grown but used for purposes other than food production, that is, biofuel production), and Category D (prohibition of all agricultural and grazing activities).

C. The Italian legislative framework on the processing of waste

117. Legislative Decree no. 22 of 5 February 1997 ("the Ronchi Decree") (transposing Directives 91/156/EEC, 91/689/EEC and 94/62/EC on waste, hazardous waste, and packaging and packaging waste respectively) had classified waste management as a public-interest activity aimed at ensuring a high level of environmental protection and effective supervision. Pursuant to this text, in force from 1997 to 2006, waste was to be recovered or disposed of without endangering human health and without using processes or methods which could harm the environment. Waste management had to comply with the principles of accountability and cooperation between all the actors involved in the production, distribution, use and consumption of the goods from which the waste was derived, in accordance with the principles of the national and EU legal systems.

118. The Ronchi Decree was repealed by Legislative Decree no. 152 of 3 April 2006 ("Legislative Decree no. 152 of 2006"). Among other points, this legislative decree prohibited the illegal dumping of waste and the discharge of waste into water systems (Article 192) and illegal waste disposal sites (Article 256 § 3). As the law did not define the concepts of "dumping" and "illegal waste disposal sites", the Court of Cassation specified that dumping (fly-tipping) was characterised by the occasional nature of the dumping (a one-off and impromptu act, with no preliminary or subsequent activity) and by the quantity of waste that was dumped, while an illegal waste disposal site implied either multiple instances of waste dumping or one single incident, provided that the latter was characterised by the *de facto* transformation of the land into a waste disposal site, having regard in particular to the quantity of the waste and the area that it covered (Court of Cassation, judgments nos. 42719 and 45145 of 2015 and nos. 18399 and 20862 of 2017).

D. The legislation on decontamination

119. Article 239 of Legislative Decree no. 152 of 2006 established that responsibility for the clean-up operations in the contaminated zones, with the exception of sites of national interest (SIN), lay with the regions, which were required to introduce regional decontamination plans ("the PRB"). This provision also excluded fly-tipping and waste discharge into water from its scope. Under Article 192 of this Legislative Decree, responsibility for land rehabilitation lay with the persons who had dumped the waste and with landowners and, failing this, with mayors of the relevant municipalities.

120. Article 252 § 1 of the same Legislative Decree specified that "Sites of national interest" for decontamination purposes were to be identified on the basis of the specific characteristics of sites, the quantity and dangerousness of the contaminants present, and on the seriousness of the impact in terms of risks to health and the environment.

121. Having approved an initial PRB in resolution no. 711 of 13 June 2005, the Campania Regional Executive Authority, pursuant to Legislative Decree no. 152 of 2006, approved a second PRB in 2013. This plan was updated by resolution no. 831 of 28 December 2017, adopted by that same entity. Under Article 251 of the above-mentioned Legislative Decree, the PRB is the programming and planning instrument by which the regional authorities identify, on the basis of criteria established by the ISPRA, the areas to be decontaminated, the order of priorities in view of the level of risk for the environment and for health, and the financial burden that the decontamination activities would entail.

122. Under Article 239 of Legislative Decree no. 152 of 2006, the PRB does not concern the areas affected by fly-tipping or by a problem of diffuse pollution. Under that same provision, these areas were to be regulated by the regional authorities via specific programmes.
123. Article 241 of Legislative Decree no. 152 of 2006 provides for the adoption of a regulation on decontamination, environmental reclamation and security measures (*messa in sicurezza*) concerning land used for agricultural and livestock production, to be adopted by means of a Decree of the Minister of the Environment jointly with the Minister of Productive Activities, the Minister of health, and the Minister of Agriculture and Forestry. The regulation was adopted through Ministerial Decree No. 46 of 1 June 2019 (see paragraph 87 above).

E. General criminal-law provisions

124. Article 39 of the Criminal Code places criminal offences into two categories: serious offences (*delitti*) and minor offences (*contravvenzioni*).
125. The distinction between the two categories depends on the different type of penalties provided for by Article 17 of the Criminal Code: life imprisonment *(ergastolo),* imprisonment (*reclusione*) and a fine (*multa*) for serious offences; minor-offence imprisonment (*arresto*) and minor-offence fine *(ammenda)* for minor offences. Among other statutory differences, minor offences are punishable by lighter penalties: minor-offence imprisonment cannot exceed a term of three years and a minor-offence fine cannot exceed the amount of EUR 10,000. Minor offences also have shorter limitation periods.
126. Under Article 434 of the Criminal Code, a person who commits acts liable to cause the collapse of a building or part thereof, or another disaster, shall be punished, if public safety is put in danger, with one to five years' imprisonment. If the collapse or disaster actually occurs, the punishment is three to twelve years' imprisonment.
127. The relevant parts of Article 439 of the Criminal Code, providing for the offence of poisoning water or foodstuffs *(avvelenamento di acque o di sostanze alimentari*) read as follows:
"Any person who poisons water or substances destined for human consumption before their consumption (*attinte*) or distribution for consumption shall be punished with no less than fifteen years' imprisonment;..."
128. The relevant parts of Article 440 of the Criminal Code, providing for the offence of adulteration or counterfeiting of foodstuffs (*adulterazione o contraffazione di sostanze alimentari*) read as follows:
"Any person who corrupts or adulterates water or substances destined for human consumption... making them dangerous for public health, shall be punished with three to ten years' imprisonment;..."

F. Criminal-law provisions on combatting environmental damage

129. Article 51 of Legislative Decree no. 22 of 5 February 1997 introduced minor offences (*contravvenzioni*) in the sphere of unauthorised waste management. Under Article 51 § 1, any person who carries out waste collection, transportation, retrieval or disposal without the required authorisation, is liable to be punished by *arresto* from three months to a year, or by a fine ranging from five million (approximately EUR 2,500) to fifty million Italian lire (approximately EUR 25,000) in the case of non-hazardous waste, and by minor-offence imprisonment (*arresto*) from six months to two years and a fine ranging from five million to fifty million lire in the case of hazardous waste. Article 51 § 3 punishes, with the same penalties, the fact of setting up or operating an unauthorised

landfill. A term of imprisonment from one to three years and a fine ranging from ten million to one hundred million lire applies if the landfill is intended, even partially, for the disposal of hazardous waste.

130. Article 256 of Legislative Decree, which entered into force on 29 April 2006 and repealed Legislative Decree no. 22 of 1997 reproduces the same offences. Pursuant to Article 157 of the Criminal Code, as in force *ratione temporis*, these offences were subjected to a three-year limitation period. Law no. 251 of 5 December 2005 increased the period to four years for offences committed after its entry into force.

131. Law no. 90 of 23 March 2001 introduced the serious offence (*delitto*) of "organised activities for the trafficking of waste", as a new Article 53 *bis*, in Legislative Decree no. 22 of 1997. The provision punishes with imprisonment from one year to six years persons who, for the purpose of obtaining unfair profit, in several operations and through organised, continuous activities, dispose, receive, transport, export, import or, in any way, manage significant quantities of waste. The penalty is increased (from three to eight years' imprisonment) where highly radioactive waste is involved. This offence was reproduced identically as Article 260 of Legislative Decree no. 152 of 2006. Legislative Decree no. 21 of 1 March 2018 transferred the offence to the Criminal Code under a new Article 452 *quaterdecies*, in the section concerning environmental crimes.

132. Article 3 of Decree-Law no. 136 of 2013, which introduced Article 256 *bis* into Legislative Decree no. 152 of 2006, established the serious offence (*delitto*) of illegally burning waste, punished with imprisonment from two to five years and with a (minimum) limitation period of six years.

133. By Law no. 68 of 2015, the legislature established specific serious offences (*delitti*) in order to combat the trafficking and illegal dumping of waste: environmental pollution, serious ecological harm, trafficking or dumping of substances with high radioactive levels, obstruction of supervisory activities and failure to decontaminate. These offences are punished with different terms of imprisonment from two to fifteen years and with fines ranging from EUR 10.000 to 100.000. The limitation period of each offence coincides with the maximum term of imprisonment provided for by each provision, with a minimum of six years.

G. Other domestic-law provisions

134. Article 2043 of the Civil Code provides:

"Any unlawful act which causes damage to another will render the perpetrator liable in damages under civil law."

135. Articles 309 and 310 of Legislative Decree no. 152 of 2006 provide for the possibility of submitting complaints to the Minister of the Environment in respect of alleged environmental damage or threat thereof. The relevant parts of Article 309 state as follows:

1. Regions, autonomous provinces and local authorities ... as well as natural or legal persons who are or could be affected by environmental damage or who have a legitimate interest in participating in the procedure for the adoption of precautionary, prevention or restoration measures ... may submit to the Minister of the Environment ... complaints and observations, accompanied by documents and information, concerning any case of environmental damage or imminent threat of environmental damage and request State intervention to protect the environment in accordance with the sixth part of this decree.

2. Non-governmental organisations promoting environmental protection, as referred to in Article 13 of Law No 349 of 8 July 1986, shall be recognised as having the interest referred to in paragraph 1.
3. The Minister of the Environment shall evaluate the requests for action and the observations attached to them relating to cases of damage or threat of damage to the environment and shall inform the requesting parties without delay of the measures taken in this regard.
4. In the event of an imminent threat of damage, the Minister of the Environment shall, in the event of extreme urgency, take action on the damage reported even before replying to the applicants in accordance with paragraph 3.

136. Article 310 of Legislative Decree no. 152 of 2006 provides, *inter alia*, that proceedings may be brought before the administrative courts in the event of a failure by the Minister of the Environment to respond (*silenzio inadempimento*) to a request lodged under Article 309.

137. Legislative Decree no. 198 of 20 December 2009 (titled "Implementation of Article 4 of Law No. 15 of 4 March 2009, on legal remedies aimed at promoting the efficiency of public authorities and providers of public services") introduced the possibility of lodging a class action against the public administrative authorities before the administrative courts.

H. Case-law

1. *Civil proceedings*

138. Between 2016 and 2018 the Rome District Court delivered a number of judgments in which it awarded damages to owners of farming and livestock businesses whose businesses had been negatively affected by the pollution affecting the Sacco River Valley area in the Latium region, where they had operated.

2. *Administrative proceedings*

(a) Judgment no. 676 of 8 February 2012 of the Campania Regional Administrative Court

139. On 11 February 2011 the environmental association *Legambiente* and a physical person, A.S., lodged a complaint under Article 309 of Legislative Decree 152 of 2006 (see paragraph 135 above). They complained about the contamination of groundwater and the deterioration of air quality due, according to the complainants, to illegal waste management practices occurring in a municipal solid waste landfill located in the Terzigno municipality in the Campania region. They invited the Ministry of the Environment to intervene and, amongst other actions, to order that the individuals responsible for the impugned conduct cease their activities immediately, to order the precautionary suspension of the landfill's operation, and to render the landfill safe. As the Ministry of the Environment did not respond, on 31 May 2011 the complainants lodged an application before the Campania Regional Administrative Court. In a judgment of 8 February 2012, the court found that the Ministry of the Environment had failed to express a view on the complaint despite the fact that almost one year had elapsed from its introduction. It specified that under Article 309 of Legislative Decree no. 152/2006 the Ministry of the Environment was under an obligation to assess complaints and to issue reasoned conclusions as to whether or not State action is required. The regional administrative court noted that this did not entail an obligation on the Ministry's part to take preventive or restorative action (*assunzione doverosa e vincolata di azioni di precauzione, prevenzione o ripristino*). It ordered the Ministry of the Environment to respond to the applicants' complaint within ninety days and provided for the appointment of a special commissioner (*commissario ad acta*) who was to intervene if, on expiry of that deadline, the Ministry had not responded.

(b) Judgment no. 8154 of 26 and 28 March 2013 of the Lazio Regional Administrative Court

140. A group of plaintiffs lodged a public class action against the Minister of the Interior under Legislative Decree no. 198 of 2009 (see paragraph 137 above), complaining that certain public administrative authorities had repeatedly and systematically failed to comply with the statutory ninety-day time limit within which the relevant administrative authorities were required to issue their residence permits. The court upheld the request, holding that it fell within the scope of public class actions as defined by Legislative Decree no. 198 of 2009, in that it concerned a violation of the time frames laid down for the adoption of administrative acts. In this connection, the court reiterated that a public class action could be lodged with a view to requesting the correct performance of a public function or the issuing of administrative acts, and not merely in the context of the provision of public services. It ordered the defendant administrative authorities to issue the necessary documents within one year, within the limits of their resources. It dismissed the remainder of the application.

(c) Judgment no. 2054 of 18 July 2013 of the Campania Regional Administrative Court

141. A group of plaintiffs lodged a public class action against the Salerno municipality under Legislative Decree no. 198 of 2009, complaining that the municipality had failed to adopt, *inter alia*, a Quality Service Charter (*carta della qualità dei servizi*) as required under relevant legislation. Finding in favour of the plaintiffs, the court highlighted that the public class action may be lodged by individual holders of interests identical to those of a larger class of users or consumers, or by associations representing the interests of their members.

(d) Judgment no. 5190 of 5 November 2015 of the Lazio Regional Administrative Court

142. A group of plaintiffs lodged a public class action against the Ministry of Education and the Ministry of the Economy and Finance under Legislative Decree no. 198 of 2009 complaining, *inter alia*, about the alleged failure by the cited Ministries to adopt the administrative acts that were necessary in order for local education authorities to pay the plaintiffs certain employment allowances to which they were entitled. In finding in favour of the plaintiffs, the court reaffirmed the principle whereby a public class action constitutes a tool for the protection of collective interests in addition to those tools already provided by the Italian Code of Administrative Procedure.

3. *Criminal proceedings*

(a) Judgment of the Naples Court of Appeal (IV Criminal Section) No. 5052 of 14 November 2012 and related proceedings (*Pellini and others*)

143. On 14 November 2008 the Nola District Court found an individual (P.C.) guilty, *inter alia*, of the offence of establishing an unauthorised landfill (Article 51 of Legislative Decree no. 22 of 5 February 1997, see paragraph 129 above) and of the offence of generating emissions of noxious fumes (Article 674 of the Criminal Code). He was sentenced to three years' imprisonment and a fine of EUR 15,000. The court further recognised the civil parties' right to compensation and awarded them provisional damages in the amount of EUR 50,000 each. Applicant no. 5 in the present case (Mario Cannavacciuolo) joined those proceedings as a civil party.

144. On 29 September 2010 the Naples Court of Appeal upheld the first-instance judgment but reduced the sentence to two years' imprisonment, with the possibility of benefitting from a suspended sentence, and a fine of EUR 10,000.

145. P.C. lodged an appeal with the Court of Cassation.

146. The Court of Cassation granted the appeal and remitted the case to the appellate court.
147. On 14 November 2012 the Naples Court of Appeal declared the prosecution of the offences time-barred.
(b) Judgment of the Naples Court of Appeal (IV Criminal Section) No. 680/2015 of 23 April 2015 and judgment of the Court of Cassation, Criminal Section I, No. 58023 of 7 May 2017 (*Pellini and others*)
148. The proceedings stemmed from an investigation which began in 2006 concerning the illegal management and disposal of approximately one million tonnes of both hazardous and non-hazardous waste.
The investigation revealed that in certain waste management companies the real content of received waste (primarily made up of waste from decontamination activities containing industrial sludge, dust from smoke abatement in iron and metal industries with high concentrations of hydrocarbons and heavy metals, and exhausted mineral oils) was concealed by falsifying the documents on its classification. In particular, the waste was taken from the producers and transferred either to storage centres or other stockpiling areas where documents accompanying the waste were modified and the waste was declassified from hazardous to non-hazardous without any treatment having been carried out.
The investigation also disclosed the continuous and what was described as "systematic" dumping of waste as described above, containing carcinogenic substances such as exhausted mineral oils containing polychlorinated biphenyls (PCBs) and asbestos, on unauthorised sites. Liquid waste was dumped in certain waterways and in the countryside around Aversa and Naples. Solid waste which included hazardous waste was mixed with other material to make compost or was buried on agricultural land or in quarries which had been transformed into unauthorised landfills. According to the outcome of the investigation, the conduct at issue had been carried out since 2002, *inter alia*, in the Giugliano, Qualiano, Bacoli, Villaricca, Acerra and Caivano municipalities and was ongoing when charges were filed.
Twenty-eight individuals were committed for trial before the Naples District court on charges, *inter alia*, of criminal conspiracy, "disaster" under Article 434 of the Criminal Code (see paragraph 126 above), organised activities for the trafficking of waste under Article 53 *bis* of Legislative Decree no. 22 of 1997 (see paragraph 131 above), collecting, transporting, retrieving, and disposing of waste without the required authorisation under Article 51 § 1 of Legislative Decree no. 22 of 5 February 1997 (see paragraph 129 above), operating or establishing an unauthorised landfill under Article 51 § 3 of Legislative Decree no. 22 of 5 February 1997 (ibid.), and misconduct in public office. For some of the defendants, the intention to aid and abet a criminal organisation was included as an aggravating circumstance under several offences. Among the individuals charged were the owners or managers of several waste management companies and waste treatment facilities, a member of the *Carabinieri* police force and public officials working for the Acerra Municipality.
149. Applicant no. 5 in the present case (Mario Cannavacciuolo) joined the proceedings as a civil party.
150. By a judgment of 29 March 2013 of the Naples District Court, some of the defendants were convicted on charges of criminal conspiracy under Article 416 of the Criminal Code; certain of their number were fully or partially acquitted on other charges. The district court found that the offence of disaster had become statute-barred for all of the defendants. The same conclusion was reached as

regards the offence of collecting, transporting, retrieving, and disposing of waste without authorisation. As regards the offence of organised activities for the trafficking of waste, the court found that it had become statute-barred for all but one of the defendants. The court dismissed the civil parties' request for damages, on the basis that their claims hinged on a finding of environmental damage and the related offence had been declared time-barred.

151. By a judgment of 23 April 2015 the Naples Court of Appeal partially upheld and partially reformed the first-instance judgment. In particular, as regards the offence of disaster it found that the first-instance court had erred in considering that the conduct in question had merely constituted a danger to public safety rather than having actually caused a disaster, which had led the first instance-court to declare the offence statute-barred. The appellate court considered that, insofar as the waste management facilities owned by three defendants (P.C., P.S. and P.G.) were concerned, the court-appointed independent expert had found that soil and water had been contaminated. The court also cited evidence demonstrating the dumping of large quantities of highly dangerous special waste deriving from such facilities in waterways. It pointed to video recordings that had been made by the forestry police during the criminal investigation which showing that the colour of the waterway had changed following the dumping of large quantities of landfill leachate. It further relied on evidence that compost had been produced using dangerous substances, and was destined to be used as fertiliser in agricultural settings and residential areas. The compost had been tested and had revealed a high concentration of hydrocarbons and dioxin, which contaminated soil and water once spread over fields as fertiliser. The court held that the nature of the contamination had assumed proportions of such duration, breadth, and intensity that the damage to the environment was considered to be "extraordinarily serious".

The court thus concluded that a disaster had actually occurred and that the offence was not time-barred. It convicted P.C., P.S. and P.G. of the offence of disaster and sentenced them to seven years' imprisonment.

The court held that prosecution of the offence of illegal trafficking of waste was time-barred for all of the defendants.

The court further acknowledged the civil parties' entitlement to compensation, although it instructed them to apply to the civil courts for quantification of the award, given to the indeterminate nature of the damage sustained by them and the absence of concrete and specific elements which would have allowed quantification.

152. The convicted individuals appealed against the latter judgment before the Court of Cassation, which dismissed the appeals in a judgment of 7 May 2017.

(c) Judgment of the Northern Naples District Court (Second Section) no. 685/2018 of 21 March 2018 (*Pezzella, Schiavone and others*)

153. In 2011 the Santa Maria Capua Vetere public prosecutor's office opened an investigation in respect of four individuals who were all suspected of having committed the offence of adulteration and counterfeiting of foodstuffs within the meaning of section 440 of the Criminal Code (see paragraph 128 above).

154. On an unspecified date the latter individuals were charged with the above offence and were committed for trial before the Northern Naples District Court. According to the indictment, they were suspected of having dumped, since the mid-1980s, 130,000 cubic metres of hazardous waste in

the Casal di Principe municipality, with consequent contamination of the soil and of water in the underlying aquifer, both of which had been tested during the criminal investigation and had revealed quantities of certain heavy metals, heavy hydrocarbons and other contaminants which exceeding the statutory safe limits.

155. In a judgment of 5 April 2018, the Northern Naples District Court declared that it lacked jurisdiction to hear the case and referred the case to the Santa Maria Capua Vetere District Court. The Court has received no further information about the outcome of the proceedings once transferred.

(d) Judgment of the Naples Assize Court of 15 July 2016 and judgment of the Naples Assize Court of Appeal (IV Section) No. 8 of 16 July 2019 (Alfani and others)

156. The proceedings originated in an investigation which disclosed a large-scale waste trafficking operation. From the late 1980s, via front companies, and though the falsification of documents, it had facilitated the illegal disposal of large amounts of waste, including hazardous waste, from industrial sources and other private parties in other parts of Italy, in landfills in the Giugliano municipality (referred to as the "Resit" complex) and other adjoining areas in the Naples and Caserta provinces

157. Following the investigation, thirty-eight individuals were committed for trial before the Naples Assize Court on charges of "disaster" under Article 434 of the Criminal Code (see paragraph 126 above) and poisoning of water under Article 439 of the Criminal Code (see paragraph 127 above). They were charged with having polluted large areas, over a period of twenty years, by illegally burying 806,590 tonnes of waste, which included approximately 300,000 tonnes of hazardous waste in landfills that were not equipped for that purpose , and in areas surrounding the landfills, causing the contamination of soil and groundwater. Several reports were submitted by court-appointed experts during the course of the proceedings with a view to assessing the contamination of soil and water in connection with the pollution at issue. The reports confirmed that the landfills where the waste was dumped and/or buried were structurally inadequate to store toxic waste. They included the results of chemical testing activities which confirmed what was defined as "serious and irreversible" contamination of all environmental elements: soil, water, and air.

Soil contamination was a direct consequence of the unauthorised burial of waste in sites without any protection measures. With regard to water pollution, one of the experts quantified the leachate from the landfills in question at 57,900 tonnes, and estimated that ten percent of it had penetrated in the aquifer, resulting in damage which he labelled as "of an irreparable nature", given the extreme difficulty of decontamination. In particular, water sampled from wells within the landfills in question, and groundwater underlying the area, were found to be contaminated with carcinogenic chlorinated halites and non-carcinogenic chlorinated halites. The expert had also found chlorinated solvent contamination in wells located outside the Resit area. In the expert's opinion, as regards the landfills located in the Resit area, the infiltration of the liquid containing the chlorinated solvents into the aquifer would have been exhausted, at the earliest, in seventy-nine years and, therefore, the gradual pollution of groundwater would have been completed by 2064, given that the beginning of this waste disposal could be traced back to the mid-1980s.

Air contamination was detected in the form of gas emissions emanating from the waste burial sites or adjacent land due to lateral migration.

According to the expert, this contamination constituted a threat to human and animal health, as well as to crops grown on such land.

158. In a judgment delivered on 15 July 2016, the Assize Court convicted, *inter alia*, four individuals of the offences of "disaster" and poisoning water. Other defendants were acquitted and certain offences, such as falsification of documents and fraud, were declared time-barred.

159. By a judgment of 17 January 2019 (reasoning filed on 16 July 2019) the Assize Court of Appeal requalified the offence of disaster and declared it time-barred. It upheld the convictions of three individuals as regards the offence of poisoning water under Article 439 of the Criminal Code and sentenced them to terms of imprisonment ranging between 10 and 18 years.

(e) Judgment of the Naples Court of Appeal (VI Criminal Section) No. 1843 of 9 March 2015 and judgment of the Court of Cassation, Criminal Section VI, No. 19001 of 5 April 2016 (*Armenino and others*)

160. The proceedings stemmed from an investigation which began in 2002 concerning the infiltration of an organised criminal group (*Camorra*) in the management and disposal of waste in the Marcianise municipality. The evidence collected by the investigating authorities revealed that an agreement had been reached between the majority shareholder in a private waste management company and a leading figure of a *Camorra* clan, with a view to enabling the latter to be involved, *de facto*, in the company's management. As described by the Court of Cassation, this collaboration had led to a wide range of illegal activities in connection with the management and disposal of waste. Following the investigation, forty-three individuals were committed for trial before the Santa Maria Capua Vetere District Court on charges of, *inter alia*, organised activities for the trafficking of waste (see paragraph 131 above), the falsification of documents identifying types of waste, and extortion of entrepreneurs operating in the waste management sector. Some of the defendants were convicted on several charges; some were fully or partly acquitted.

161. On 9 March 2015 the Naples Court of Appeal upheld the conviction of some of the defendants for the offence of organised activities for the trafficking of waste; it reassessed the sentence of one defendant, imposing nineteen years' imprisonment and a fine of EUR 4,800.

162. Some of the defendants lodged appeals, but these were dismissed by the Court of Cassation on 5 April 2016.

(f) Judgment of the Naples District Court (Criminal Section) No. 9614/02 of 20 December 2002 (*Cavagnoli*)

163. The Naples District Court found an individual, B.C., guilty of having committed, *inter alia*, a number of minor offences under Article 51 of Legislative Decree no. 22 of 5 February 1997, and namely collecting special waste, including hazardous waste, without authorisation, and the illegal dumping and disposal of hazardous waste (see paragraph 129 above). B.C was the legal representative of a storage company for motor vehicles and he was found by the court to have stockpiled broken and rusty vehicle parts, including car batteries and car tyres. The investigation also revealed the presence of abandoned vehicles. Motor oil had leaked from some of this waste onto ground that had not been made waterproof. B.C. was sentenced to six months' imprisonment and a fine of EUR 140.

II. EUROPEAN UNION LAW AND PRACTICE

A. Relevant European Union law

164. Recitals 2, 6 and 8 to 10 of the Preamble to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste, which was in force until 11 December 2010, read as follows:

"(2) The essential objective of all provisions relating to waste management should be the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste.

...

(6) In order to achieve a high level of environmental protection, Member States should, in addition to taking responsible action to ensure the disposal and recovery of waste, take measures to restrict the production of waste particularly by promoting clean technologies and products which can be recycled and re-used, taking into consideration existing or potential market opportunities for recovered waste.

...

(8) It is important for the [European Union] as a whole to become self-sufficient in waste disposal and desirable for Member States individually to aim at such self-sufficiency.

(9) In order to achieve those objectives, waste management plans should be drawn up in the Member States.

(10) Movements of waste should be reduced and Member States may take the necessary measures to that end in their management plans."

Article 4 of the Directive provides as follows:

"1. Member States shall take the necessary measures to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and in particular:

(a) without risk to water, air or soil, or to plants or animals;

(b) without causing a nuisance through noise or odours;

(c) without adversely affecting the countryside or places of special interest.

2. Member States shall take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste."

165. Article 5 is worded as follows:

"1. Member States shall take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of disposal installations, taking account of the best available technology not involving excessive costs. The network must enable the Community as a whole to become self-sufficient in waste disposal and the Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste.

2. The network referred to in paragraph 1 must enable waste to be disposed of in one of the nearest appropriate installations, by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health."

166. Article 7 provides that:

"1. In order to attain the objectives referred to in Articles 3, 4 and 5, the competent authority or authorities referred to in Article 6 shall be required to draw up as soon as possible one or more waste management plans. Such plans shall relate in particular to:

(a) the type, quantity and origin of waste to be recovered or disposed of;
(b) general technical requirements;
(c) any special arrangements for particular wastes;
(d) suitable disposal sites or installations.
2. The plans referred to in paragraph 1 may, for example, cover:
...
(c) appropriate measures to encourage rationalisation of the collection, sorting and treatment of waste.
3. Member States shall cooperate as appropriate with the other Member States and the Commission to draw up such plans. They shall notify Commission of them.
...".

B. The judgments of the Court of Justice of the European Union (formerly the Court of Justice of the European Communities; "the Court of Justice")

167. On 22 March 2005 the Commission of the European Communities (which on 1 December 2009 became the European Commission; "the Commission") brought an action for non-compliance against Italy before the Court of Justice under Article 226 of the Treaty establishing the European Community ("TEC") (now Article 258) (Case C-135/05). Criticising the existence of a number of illegal and unsupervised landfill sites in Italy, the Commission alleged that the Italian authorities had failed to honour their obligations under Articles 4, 8 and 9 of Directive 75/442/EEC on waste, Article 2 § 1 of Directive 91/689/EEC on hazardous waste and Article 14, letters (a) to (c), of Directive 1999/31/EC on the landfill of waste.

168. In its judgment of 26 April 2007 *Commission v. Italy* (C-135/05, EU:C:2007:250) the Court of Justice noted the general non-compliance of the tips with the applicable provisions, observing, *inter alia*, that the Italian Government did not dispute the existence in Italy of at least 700 illegal landfills containing hazardous waste, which were therefore not subject to any control measures.

169. It concluded that the Italian Republic had failed to fulfil its obligations under the provisions cited by the Commission, in that it had failed to adopt all the necessary measures to ensure that waste was recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and had failed to prohibit the abandonment, dumping or uncontrolled disposal of waste.

170. On 3 July 2008 the Commission brought a new action for non-compliance against Italy under Article 226 TEC (Case C-297/08).

171. In its judgment of 4 March 2010 *Commission v. Italy* (C-297/08, EU:C:2010:115) the Court of Justice, while noting the measures taken by Italy in 2008 to tackle the "waste crisis", referred to the existence of a "structural deficit in terms of the installations necessary for the disposal of the urban waste produced in Campania, as evidenced by the considerable quantities of waste which [had] accumulated along the public roads in the region". It held that Italy had "failed to meet its obligation to establish an integrated and adequate network of disposal installations enabling it ... to move towards the aim of ensuring disposal of its own waste and, in consequence, [had] failed to fulfil its obligations under Article 5 of Directive 2006/12". According to the Court of Justice, that failure could not be justified by such circumstances as the opposition of the local population to waste disposal sites, the presence of criminal activity in the region or the non-performance of contractual obligations

by the undertakings entrusted with the construction of certain waste disposal infrastructures. It explained that this last factor could not be considered force majeure, because the notion of force majeure required the non-performance of the act in question to be attributable to circumstances, beyond the control of the party claiming force majeure, which were "abnormal and unforeseeable and the consequences of which could not have been avoided despite the exercise of all due diligence", and that a diligent authority should have taken the necessary precautions either to guard against the contractual non-performance in question or to ensure that, despite those shortcomings, actual construction of the infrastructures necessary for waste disposal would be completed on time. The Court of Justice also noted that the Italian Republic did not dispute that "the waste littering the public roads totalled 55,000 tonnes, adding to the 110,000 tonnes to 120,000 tonnes of waste awaiting treatment at municipal storage sites". Concerning the environmental hazard, the Court of Justice reiterated that, regard being had in particular to the limited capacity of each region or locality for waste reception, the accumulation of waste constituted a danger to the environment. It concluded that the accumulation of such large quantities of waste along public roads and in temporary storage areas had given rise to a "risk to water, air or soil, and to plants or animals" within the meaning of Article 4(1)(a) of Directive 2006/12, had caused "a nuisance through noise or odours" within the meaning of Article 4(1)(b), and was likely to affect "adversely ... the countryside or places of special interest" within the meaning of Article 4(1)(c) of that Directive. As to the danger to human health, the Court of Justice noted that "that the worrying situation of accumulation of waste along the public roads [had] exposed the health of the local inhabitants to certain danger, in breach of Article 4(1) of Directive 2006/12".

172. On 10 December 2010 the Commission brought a further action before the Court of Justice for non-compliance under Article 260 § 2 of the Treaty on the Functioning of the European Union (TFEU) (Case C-653/13) on account of Italy's failure to adopt all the measures necessary to comply with the judgment in *Commission v. Italy* (Case C-297/08, EU:C:2010:115).

173. In its judgment of 16 July 2015 *Commission v. Italy* (C-653/13, EU:C:2015:478), the Court of Justice noted that the obligation to dispose of waste without endangering human health and without harming the environment formed part of the very purpose of the Union's policy with regard to the environment, by virtue of Article 191 TFEU. In particular, failure to comply with the obligations arising from Article 4 of Directive 2006/12 was likely, by the very nature of these obligations, to endanger human health directly and to harm the environment and had, therefore, to be considered as particularly serious.

It considered that significant shortcomings in the Campania Region's ability to dispose of its waste, including the production of urban waste, representing more than 8% of national production, was such as to compromise seriously the Italian Republic's capacity to reach the objective of national self-sufficiency. In addition, it noted that many waste disposal sites across almost all the Italian regions had not yet been brought into line with the relevant provisions on waste management. According to the Court of Justice, this finding ran counter to the Italian Republic's assertion that the lack of regional self-sufficiency in Campania could be compensated by inter-regional transfers of waste.

In conclusion, the Court of Justice noted that by failing to adopt all the necessary measures required to comply with the judgment in *Commission v Italy* (case no. C-297/08, EU:C:2010:115), in which it had stated that the Italian Republic had failed to comply with its obligations under Articles 4 and 5

of Directive 2006/12, it had failed to meet its obligations under Article 260, paragraph 1, TFEU. In consequence, the Italian Republic was ordered to pay the Commission a penalty of 120,000 euros (EUR) per day of delay in implementing the necessary measures in order to comply with the judgment in *Commission v. Italy* (C-297/08, EU:C:2010:115), from the date of delivery of the Court of Justice's judgment of 16 July 2015 and until full execution of that judgment, plus a lump sum penalty of EUR 20 million.

III. international law and practice

A. Material regarding waste collection in Italy and the *Terra dei Fuochi* phenomenon

1. Council of Europe

174. On 6 June 2019 the Committee of Ministers examined the execution of the Court's judgment in *Di Sarno and Others v. Italy* (cited above). The relevant parts of the document prepared in this connection (CM/Notes/1348/H46-13, Notes on the Agenda, 6 June 2019) read as follows:

(...)

With regard to the collection and treatment phases of the waste cycle, the available information shows a consolidation of the positive trend previously noted by the Committee, concerning notably the increase of the percentage of sorted waste which between 2014 and 2017 increased by 5%. Globally, from 2009 to 2017 the level of sorted waste went from 29% to 53%. The efforts of the authorities aimed at promoting systems of separate collection of waste and the result achieved should be noted with interest.

(...)

With regard to the disposal phase, a distinction must be made between, on the one hand, the everyday functioning of the waste disposal system and, on the other, the elimination of the so-called "historical waste" (or "eco-bales") accumulated during the emergency period up until 2009.

Concerning the first point, in the absence of detailed and updated information it is not possible to assess the current situation and the effectiveness of the waste disposal system. The Committee may therefore wish to invite the authorities to provide specific information on the current daily functioning of the waste disposal system, including its capacity on the basis of the existing plants to dispose of the waste produced in the region of Campania, and the long-term strategies and solutions adopted and/or envisaged to ensure the effective functioning of this crucial segment of the waste management cycle. It is noted in this context that several episodes of accumulation of waste in the streets were recently recorded.

As for the disposal of the "historical waste" accumulated in Campania, the available information shows that the measures adopted to tackle this problem have not led the expected results. The situation appears to be of concern. While the elimination of about 38% of the stored waste has been tendered or contracted to third parties, only 1.9% of the stored waste had been removed as of 15 February 2018.

It appears therefore essential that the authorities adopt, without further delay, all the necessary measures to implement the special plan of December 2015 in order to remove the accumulated "historical waste" and to clean-up the locations in which it is currently stocked. Updated information on the current status of execution of the plan as well as the timing envisaged for its full implementation is also necessary.

(...)

Ensuring the effective and coordinated monitoring of all the phases of the waste management process is a crucial aspect of the response to the complex and multifaceted problem at stake. The efforts of the Italian authorities led to the establishment in recent years of various monitoring mechanisms to oversee the functioning of the waste management cycle and to prevent the illegal disposal of waste.

However, the available information does not allow assessing on the one hand the existing level of coordination between all the established mechanisms (including those brought to the attention of the Committee at its last examination of this case) and, on the other hand, as previously requested by the Committee, their capacity to issue recommendations where necessary and, in the affirmative, on the follow-up given to them. Moreover, it would be useful to obtain further information on the practical functioning of the established monitoring mechanisms including their capacity to identify situations where the waste disposal is taking place in a way that adversely affects the environment and interventions by the authorities are required.

175. On 6 June 2019, at the conclusion of the 1348th meeting (4-6 June 2019), the Committee of Ministers adopted a decision (CM/Del/Dec(2019)1348/H46-13) concerning the supervision of the execution of the *Di Sarno* judgment. The relevant extracts read as follows:

The Deputies,

1.with regard to the collection and treatment of waste, noted with interest the efforts of the Italian authorities aimed at promoting systems of separate collection and the consolidation in recent years of the encouraging results previously achieved in terms of the separate collection of waste;

2.with regard to waste disposal, noted with concern that, at least until 15 February 2018, only a minimal part of the so-called "historical waste" accumulated prior to 2009 had been removed and called on the authorities to implement without further delay the plan for the removal of this type of waste; (...)

176. On 16 September 2021, at the conclusion of its 1411th meeting (14-16 September 2021), the Committee of Ministers adopted another decision (CM/Del/Dec(2021)1411/H46-20) concerning the supervision of the execution of the *Di Sarno* judgment. The relevant extracts read as follows:

"The Deputies, ...

2. recalled their previous assessments concluding that sufficient progress has been made in addressing the systemic deficiencies in the waste collection and treatment in the region of Campania;
3. noted, however, with deep regret that, despite also the intensive efforts undertaken by the Secretariat to follow up the Committee's previous decision of June 2019 with them, the authorities have not provided any information on any steps taken to address the remaining questions outlined in that decision in relation to (i) the current daily functioning of the waste disposal system; (ii) the removal of the so-called "historical waste" accumulated prior to 2009; (iii) the practical functioning and the level of coordination of the various monitoring mechanisms established at domestic level and (iv) the lack of effective remedies;
4. noted, in this context, with concern that dysfunctions continue to be reported in relation to waste disposal in Campania, notwithstanding the various domestic mechanisms established to oversee the functioning of the waste management cycle and to prevent the illegal disposal of waste; ..."

177. On 10 June 2022, at the conclusion of the 1436th meeting (08-10 June 2022), the Committee of Ministers adopted another decision (CM/Del/Dec(2022)1436/H46-12) concerning the supervision of the execution of the *Di Sarno* case. Relevant extracts read as follow:

2. recalled also that, whilst progress has been made concerning the dysfunctions in the collection and treatment of waste, questions remain in the execution of this judgment concerning several aspects of the disposal phase of the waste management cycle and the absence of a remedy to obtain appropriate redress at domestic level in similar situations;

3. with regards to the daily waste disposal, took note of the information provided on the current regional capacity and strategy to eliminate the produced waste; noted however with some concern that no significant progress in the level of collection of sorted waste, considered crucial by the authorities to reach the regional autonomy in the disposal of waste, was observed in the period 2017-2020; invited the authorities to redouble their efforts in the areas most concerned by this issue and provide their comprehensive assessment, addressing also the concerns expressed by civil society, of the adequacy of the current system to prevent similar violations;

4. with regards to the elimination of the so-called "historical waste", noted with satisfaction that the strategy outlined by the authorities has led by 2021 to the removal of almost 20% of this type of waste and further progress is expected as of 2022 through the operation of two additional plants; invited the authorities to secure the efficient functioning of these plants and the complete elimination of the remaining quantity of this type of waste and to keep the Committee informed on the further progress achieved;

5. noted the information provided on the established monitoring mechanisms, and the forthcoming entry into force of a new system of waste traceability; called on the authorities to provide updated information on their interplay and effectiveness in detecting and solve possible shortcomings, clarifying, as previously requested, whether they can issue binding recommendations; (...)

2. *United Nations*

178. The United Nations Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes (also referred to as UN Special Rapporteur on Toxics and Human Rights), Marcos A. Orellana, visited Italy from 30 November to 13 December 2021. His final report, published on 13 July 2022 (A/HRC/51/35/Add.2), contains a section entitled *Terra dei Fuochi*. The relevant extracts read as follows:

"37. The so-called Terra dei Fuochi (Land of Fires) in Campania is home to some 3 million people and includes approximately 500 contaminated sites in 90 municipalities between the north-western part of Caserta and the north-eastern part of Naples. Fifty-six of these municipalities are in the province of Naples and thirty-four in the province of Caserta, with an exposed population of 2,418,440 and 621,153 inhabitants respectively. (...) Estimates from 2015 indicated that more than 10 million tons of illegal garbage have been dumped in the area over the past 20 years. (...)

38. Part of the waste was transported to Campania from the industrialized areas of the north of Italy by the so-called Ecomafia. Another part of the waste was generated by the region's local industries. In the past, the risk involved for illegal waste disposal was relatively low, since it was treated as a simple misdemeanour with low penalties. This encouraged many industries and companies in the country to associate themselves with criminal networks to lower the cost of their waste disposal. In

2013 alone, illegal disposal of garbage and toxic waste generated an estimated €16 billion for organized crime syndicates in Italy.

40. Illegal dumping and burning of hazardous wastes have generated very high levels of air, water and soil pollution in certain areas. Of the 400 hectares that have been analysed by the authorities, farming has been totally banned on 12 per cent and partially banned on another 20 per cent. However, the scope of the contamination is not fully known. Studies documented increased morbidity and mortality of people living in the polluted areas (...). Despite the Special Rapporteur's requests, the regional health authorities have not provided detailed data that could refute these findings.

(...) Burning of waste still continues in the Campania region, albeit at lower levels than in the early 2000s.

(...) The Government has taken several initiatives, including legislative measures in 2014, for the assessment and remediation of contaminated sites. However, sufficient resources have not been allocated for the effective implementation of the law. Remediation activities have therefore not yet been implemented and more support from the central Government is required."

B. Material regarding other issues

1. *Right to life*

179. In its General Comment No. 36 on the right to life (Article 6 of the International Covenant on Civil and Political Rights), published on 3 September 2019, the UN Human Rights Committee stated as follows:

"3. The right to life is a right that should not be interpreted narrowly. It concerns the entitlement of individuals to be free from acts and omissions that are intended or may be expected to cause their unnatural or premature death, as well as to enjoy a life with dignity." ...

180. In the case of *Portillo Cáceres v. Paraguay*[1] the Human Rights Committee held as follows:

"7.4 The Committee also takes note of developments in other international tribunals that have recognized the existence of an undeniable link between the protection of the environment and the realization of human rights and that have established that environmental degradation can adversely affect the effective enjoyment of the right to life. Thus, severe environmental degradation has given rise to findings of a violation of the right to life.

7.5 In the present case, the Committee is of the view that heavily spraying the area in question with toxic agrochemicals – an action which has been amply documented – poses a reasonably foreseeable threat to the authors' lives given that such large-scale fumigation has contaminated the rivers in which the authors fish, the well water they drink and the fruit trees, crops and farm animals that are their source of food. (...) Consequently, in view of the acute poisoning suffered by the authors, as acknowledged in the amparo decision of 2011 (paras. 2.20 and 2.21), and of the death of Mr. Portillo Cáceres, which has never been explained by the State party, the Committee concludes that the information before it discloses a violation of article 6 of the Covenant in the cases of Mr. Portillo Cáceres and the authors of the present communication."

2. *Collection and dissemination of environmental information*

181. The United Nations Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ("the Aarhus Convention") was adopted on 25 June 1998 and came into force on 30 October 2001. Italy ratified the Convention on 13 June 2001.

The Preamble to the text recognises that adequate protection of the environment is essential to human well-being and the enjoyment of basic human rights, including the right to life itself.
182. Article 5 § 1 (c) of the Aarhus Convention requires each Party to ensure that "in the event of any imminent threat to human health or the environment, whether caused by human activities or due to natural causes, all information which could enable the public to take measures to prevent or mitigate harm arising from the threat and is held by a public authority is disseminated immediately and without delay to members of the public who may be affected".

3. *The precautionary principle*

183. By virtue of the precautionary principle, enshrined in Article 191 of the TFEU, a lack of certainty regarding the available scientific and technical data cannot justify States delaying the adoption of effective and proportionate measures to prevent a risk of serious and irreversible damage to the environment (see *Di Sarno*, cited above, § 75). According to the case-law of the Court of Justice of the European Union, "where there is uncertainty as to the existence or extent of risks to human health, the institutions may take protective measures without having to wait until the reality and seriousness of those risks become fully apparent" (Judgment of 5 May 1998, in *United Kingdom v Commission*, C-180/96, EU:C:1998:192, paragraph 99; and judgment of 5 May 1998 in *The Queen v Ministry of Agriculture, Fisheries and Food and Commissioners of Customs & Excise, ex parte National Farmers' Union and Others*, C-157/96, EU:C:1998:191, paragraph 63).
184. On 15 November 2017 the Inter-American Court of Human Rights delivered an Advisory Opinion entitled "The Environment and Human Rights"[2]. The relevant concluding part of the Advisory Opinion reads as follows:
"Conclusion ...
242. Based on the above, in response to the second and third questions of the requesting State, it is the Court's opinion that, in order to respect and to ensure the rights to life and to personal integrity:
a. States have the obligation to prevent significant environmental damage within or outside their territory, in accordance with paragraphs 127 to 174 of this Opinion.
b. To comply with the obligation of prevention, States must regulate, supervise and monitor the activities within their jurisdiction that could produce significant environmental damage; conduct environmental impact assessments when there is a risk of significant environmental damage; prepare a contingency plan to establish safety measures and procedures to minimize the possibility of major environmental accidents, and mitigate any significant environmental damage that may have occurred, even when it has happened despite the State's preventive actions, in accordance with paragraph 141 to 174 of this Opinion.
c. States must act in keeping with the precautionary principle in order to protect the rights to life and to personal integrity in the case of potential serious or irreversible damage to the environment, even in the absence of scientific certainty, in accordance with paragraph 180 of this Opinion.
185. In the case of the *La Oroya Population v. Peru*[3], the Inter-American Court of Human Rights held the State authorities responsible for their failure to protect the inhabitants of the city of La Oroya who had been exposed to toxic pollution from a metallurgical complex. The relevant part of the judgment reads as follows[∗]:
"207. (...) this Court recalls that States must act in accordance with the precautionary principle in order to prevent the violation of the rights of individuals in cases where there are plausible

indicators that an activity could cause serious and irreversible damage to the environment, even in the absence of scientific certainty. Therefore, even in the absence of individualised scientific certainty, but where there are elements that make it possible to presume the existence of a significant risk to the health of persons due to exposure to high levels of environmental pollution, States must adopt measures that are effective in preventing exposure to such pollution. For this reason, the Court considers that the absence of scientific certainty about the particular effects that environmental pollution may have on the health of persons cannot be a reason for States to postpone or avoid the adoption of preventive measures, nor can it be invoked as a justification for the failure to adopt measures for the general protection of the population."

THE LAW

I. JOINDER OF THE APPLICATIONS

186. Having regard to the similar subject matter of the applications, the Court finds it appropriate to examine them jointly in a single judgment (Rule 42 § 1 of the Rules of Court).

II. PRELIMINARY ISSUE: Continued examination of application no. 39742/14 (Article 37 § 1 (a))

187. The Court observes that Article 37 § 1 of the Convention, in its relevant parts, provides:

"1. The Court may at any stage of the proceedings decide to strike an application out of its list of cases where the circumstances lead to the conclusion that

(a) the applicant does not intend to pursue his application; ...

However, the Court shall continue the examination of the application if respect for human rights as defined in the Convention and the Protocols thereto so requires."

188. Having communicated the application to the respondent Government and received their observations, on 7 October 2019 the Court invited the applicants, including the applicants in application no. 39742/14, to submit their claims for just satisfaction before 18 November 2019. Following an extension request by the applicants in application no. 51567/14, a new deadline for the submission of observations and just satisfaction was set for 20 January 2020. The letters were sent to the applicants' representatives, using the addresses they had indicated as their respective addresses for correspondence.

189. As no reply was received from the applicants in application no. 39742/14, on 11 February 2020 the Court advised their representative that the deadline for submission of their observations and just satisfaction claims had expired, but no observations had reached the Court. He was informed that, under Article 37 § 1 (a) of the Convention, failure to reply might lead the Court to conclude that the applicants were no longer interested in pursuing their application and the Court could thus strike the case out of its list of cases. The letter was sent to the applicants' representative through the Court's Electronic Communications Service (eComms). The letter was downloaded by the applicants' representative on 13 July 2021. However, no response has been received.

190. The Court considers that, in the above circumstances, the applicants in application no. 39742/14 (i.e. applicants nos. 1-4) may be regarded as no longer wishing to pursue their application, within the meaning of Article 37 § 1 (a) of the Convention.

191. Before striking out a case, the Court must however consider whether there are any circumstances regarding respect for human rights as defined in the Convention and its Protocols which require the continued examination of the case (Article 37 § 1 *in fine*). In this respect, the Court considers that the subject matter of the application under scrutiny concerns what may be considered as an important question of general interest, as it concerns a large-scale phenomenon of environmental pollution. However, the Court notes that the other applications joined to application no. 39742/14 concern the same factual context and raise analogous legal issues. The Court will therefore have an opportunity to determine these issues and an examination on the merits of the present application would not bring any new element in this regard. Accordingly, the Court considers that respect for human rights does not require it to continue the examination of application no. 39742/14.

192. In view of the above considerations, the Court finds it appropriate to strike application no. 39742/14 (lodged by applicants nos. 1-4) out of the list of cases.

III. the government's preliminary objection

A. The parties' submissions

193. The Government submitted that the Court of Justice of the European Union had delivered two judgments (see paragraphs 31 and 56 above) which, in their view, covered a number of issues raised by the applicants. In these circumstances, they argued that the Court ought to be prevented from examining the merits of the case and invited it to declare the applications inadmissible on this ground.

194. The applicants in applications nos. 74208/14 and 21215/15 contested that argument.

B. The Court's assessment

195. The Court will examine this issue under Article 35 § 2 (b) of the Convention, which reads:

"... 2. The Court shall not deal with any application submitted under Article 34 that ...

(b) is substantially the same as a matter that has already been examined by the Court or has already been submitted to another procedure of international investigation or settlement and contains no relevant new information. ..."

196. The Court observes at the outset that what is in issue is the second part of Article 35 § 2 (b) of the Convention, which reflects the principle of *litis pendens*. Its purpose is to avoid a situation where several international bodies are simultaneously dealing with applications which are substantially the same; this would be incompatible with the spirit and the letter of the Convention, which seeks to avoid a plurality of international proceedings relating to the same cases (see *Radomilja and Others v. Croatia* [GC], nos. 37685/10 and 22768/12, § 119, 20 March 2018).

197. As regards the first limb of this criterion, the Court reiterates that an application is considered to be "substantially the same" when the facts, the parties and the complaints are identical (see *Selahattin Demirtaş v. Turkey (no. 2)* [GC], no. 14305/17, § 181, 22 December 2020).

198. Regarding the second limb, that is, whether a matter raised in an individual application has already been submitted to "another procedure of international investigation or settlement" within the meaning of those terms as stipulated by Article 35 § 2 (b), the Court reiterates that its examination is not limited to a formal verification but extends, where appropriate, to ascertaining whether the nature of the supervisory body, the procedure it follows and the effect of its decisions are such that the Court's jurisdiction is excluded by that provision. In that context, the main purpose

of the Court's examination is to determine whether the procedure before that body may be treated as similar, in its procedural aspects and potential effects, to the right of individual application provided for in Article 34 of the Convention (see *Selahattin Demirtaş*, cited above, § 182).

199. The Court further reiterates that one of its functions in dealing with applications lodged under Article 34 is to render justice in individual cases and, if necessary, to afford just satisfaction (see *Bryan and Others v. Russia*, no. 22515/14, § 38, 27 June 2023).

200. Turning to the facts of the present case, the Court notes at the outset that the proceedings before the CJEU relied on by the Government had been initiated by the European Commission under Article 226 TEC and Article 260 § 2 TFEU, respectively (see paragraphs 21, 22, 29, and 44 above) and did not stem from a complaint by a private individual (see, in contrast, *Karoussiotis v. Portugal*, no. 23205/08, ECHR 2011 (extracts), in which the applicant in the case before the Court had submitted the same facts and complaints to both the Court and the European Commission). The Court notes that, if the Commission considers that a Member State has failed to comply with its obligations under EU law, it can bring an action for non-compliance against that Member State before the CJEU under Article 258 TFEU (formerly Article 226 TEC). As an outcome, the CJEU may deliver a judgment stating that the Member State in question has infringed EU law. Should the Member State fail to comply with this judgment, under Article 260 § 2 TFEU (formerly Article 228 § 2 EC) the Commission may bring a further action against the Member State before the CJEU for the imposition of financial sanctions. If the CJEU finds that there is an infringement, under Article 260 § 3 TFEU it may impose a lump sum or penalty payment on the Member State concerned.

201. The Court has already had the opportunity to note that any finding of an infringement by the CJEU merely obliges the Member State in question to comply with EU law and does not serve to resolve individual cases and cannot lead to awards of individual reparation, even when the proceedings are initiated by individual complainants (see *Karoussiotis*, cited above, § 73-74; also see, *mutatis mutandis*, *De Ciantis v. Italy* (dec.), no. 39386/10, § 32, 16 December 2014).

202. Having regard to the foregoing, the Court takes the view that the procedure before the CJEU relied on by the Government is not similar, in either its procedural aspects or its potential effects, to the right of individual application provided for in Article 34 of the European Convention on Human Rights and, therefore, does not constitute a "procedure of international investigation or settlement", within the meaning of Article 35 § 2 (b) of the Convention.

203. It follows that the Court is not barred, pursuant to this provision, from examining the merits of this case and the objection raised by the Government must be dismissed.

IV. ALLEGED VIOLATION OF ARTICLEs 2, 8, and 10 OF THE CONVENTION

204. Relying on Articles 2 and 8 of the Convention, the individual applicants complained that the Italian authorities were aware of the existence of a risk to their lives and health or to the lives and health of their deceased relatives as a result of the disposal of waste in unauthorised sites and the illegal burying and burning of hazardous waste, and that those authorities did not take adequate protective measures. All the individual applicants also complained, under the same provisions, that there was no adequate legal framework that would have enabled the authorities to prosecute those responsible for the pollution in an effective manner.

205. Relying on the same Articles of the Convention, the applicant associations alleged that the authorities were aware of the existence of a risk to the lives and health of their members on account

of the disposal of waste in unauthorised sites and the illegal burying and burning of hazardous waste, and that they did not take adequate protective measures. They also complained, under those same provisions, that there was no adequate legal framework that would have enabled the authorities to prosecute those responsible for the pollution in an effective manner.

206. Relying on Articles 8 and 10 of the Convention, the individual applicants alleged a failure by the authorities to provide information concerning the dangers to their health arising from the pollution. Relying only on Article 8 of the Convention, the applicant associations alleged a failure by the authorities to provide information concerning the dangers to their members' health arising from the pollution.

207. The Court, being the master of the characterisation to be given in law to the facts of a case (see *Radomilja and Others v. Croatia* [GC], nos. 37685/10 and 22768/12, § 114, 20 March 2018), considers that the latter complaint about the alleged failure to provide information, raised by the individual applicants under Articles 8 and 10, falls to be examined solely under Article 8 of the Convention.

208. As a consequence, the provisions relevant to the applicants' complaints read as follows:

Article 2

"1. Everyone's right to life shall be protected by law. No one shall be deprived of his life intentionally save in the execution of a sentence of a court following his conviction of a crime for which this penalty is provided by law.

2. Deprivation of life shall not be regarded as inflicted in contravention of this article when it results from the use of force which is no more than absolutely necessary:

(a) in defence of any person from unlawful violence;

(b) in order to effect a lawful arrest or to prevent the escape of a person lawfully detained;

(c) in action lawfully taken for the purpose of quelling a riot or insurrection."

Article 8

"1. Everyone has the right to respect for his private and family life, his home and his correspondence.

2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others."

A. Admissibility

1. *Victim status/locus standi*

(a) Applicant associations

(i) The parties' submissions

209. The Government argued that in order to comply with the requirements of Article 34 of the Convention, the applicant associations (listed under numbers 15, 16, 17, 18 and 19 in Annex I) must be able to demonstrate that they had been directly affected by the alleged breach. Moreover, relying on the Court's case-law in *Grande Oriente d'Italia di Palazzo Giustiniani v. Italy* (no. 35972/97, ECHR 2001-VIII), the Government argued that the rights protected by Articles 8, 9 and 10 could be invoked only by an association's members and not by the association as such. Based on the foregoing

considerations, the Government concluded that the listed applicant associations could not be regarded as victims within the meaning of Article 34 of the Convention. They further argued that the associations were prevented from acting as representatives of their individual members as they had no power of attorney to act on their behalf.

210. The applicant associations (applicants nos. 15, 16, 17, 18, and 19) noted, at the outset, that their main goal involved the protection of the environment in the areas of Campania affected by the *Terra dei Fuochi* phenomenon. Moreover, they highlighted that the founders, administrators, and members of the associations all resided in municipalities affected by the phenomenon. The applicant associations further noted that they had consistently and publicly denounced the pollution affecting the area and the State authorities' failure to protect the lives of their members and, more broadly, the lives of the Campania Region's inhabitants. They had also advocated for measures to be taken by the authorities, lodged complaints and joined various sets of criminal proceedings as civil parties.

211. The applicant associations acknowledged that the Convention does not envisage the bringing of an *actio popularis*. However, they argued that the general interest they sought to protect, especially when viewed against the complexity of the *Terra dei Fuochi* phenomenon and a background of structural dysfunctions, could not be equated to an *actio popularis*.

212. Lastly, they pointed out that in *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania* [GC] (no. 47848/08, ECHR 2014), the Court had been satisfied that in the exceptional circumstances of that case and bearing in mind the serious nature of the allegations at issue, an association was allowed to act as a representative of the applicant, notwithstanding the fact that it had no power of attorney to act on his behalf.

213. Based on the foregoing considerations, the applicant associations invited the Court to recognise their status as victims of the violations complained of under Articles 2 and 8.

(ii) The third-party interveners

214. Client Earth submitted that, in the light of the complexity of environmental matters and the expertise required to address environmental issues, national, EU and international law recognise the privileged status and standing of environmental associations and their "watchdog" function. Associations are essential to give a voice to individuals affected by environmental pollution who do not necessarily have the technical, financial or legal capacity to protect their rights.

(iii) The Court's assessment

215. The principles with respect to victim status and, in particular, the victim status of associations, have been summarised by the Court, in a detailed manner, in *Yusufeli İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği v. Turkey* (dec.), no. 37857/14, §§ 36-41, 20 January 2022.

216. The Court considers that, in assessing whether the applicant associations may be considered victims of an alleged violation of the Convention, weight must be attached to the nature of the Convention right at stake and the manner in which it has been invoked by the applicant associations in question (see, *mutatis, mutandis*, *Yusufeli İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği*, cited above, § 41). In this regard, it notes that the rights at stake are Articles 2 and 8, and that an infringement of these rights allegedly arises, according to the manner in which the complaints have been formulated, from a failure by the State to take steps to protect the life and health of the associations' members. As regards Article 2, the Court has held that such a right is, by its nature, not susceptible of being exercised by an association, but only by its members (see *Yusufeli*

İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği, cited above, § 41, and the refences cited therein). The Court has also found that it would be inconceivable that physical integrity, susceptible to be enjoyed by human beings, could be attributed to a legal person (see *Identoba and Others v. Georgia*, no. 73235/12, § 45, 12 May 2015). The Court has further pointed out that an association is in principle not in a position to rely on health considerations to allege a violation of Article 8 (see *Greenpeace E.V. and Others v. Germany* (dec.), no. 18215/06, 12 May 2009). It has also found that an association could not claim to have victim status in respect of a complaint raised under Article 8 where the alleged infringement of the right resulted from nuisances or problems which can be encountered only by natural persons (see *Asselbourg and Others v. Luxembourg* (dec.), no. 29121/95, ECHR 1999-VI). As the infringement alleged in the present case under Article 8 essentially overlaps with the one complained of under Article 2, and stems from a danger to health on account of exposure to a pollution phenomenon, which can only affect natural persons, the Court considers that the applicant associations cannot be considered as having been "directly affected" by the alleged violations.

217. As to the complaint concerning the provision of information by the authorities, the Court notes at the outset that the applicant associations' complaint does not concern an alleged failure to grant them access to existing information, a positive obligation that the Court has, under certain conditions, recognised to exist and for which associations were considered as victims in their own right (see, for example, and from the perspective of Article 10, *Association Burestop 55 and Others v. France*, nos. 56176/18 and 5 others, § 83, 1 July 2021 and *Magyar Helsinki Bizottság v. Hungary* [GC], no. 18030/11, §§ 149-156, 8 November 2016). Rather, the complaint hinges on the alleged failure by the authorities to provide, *proprio motu*, information concerning the risks to their members' health in connection with the pollution phenomenon at issue. In this respect, the Court has recognised, in a number of cases concerning dangerous activities, the existence of a positive obligation to provide information as part of preventive measures under the substantive aspect of Articles 2 and 8 (see *Öneryıldız v. Turkey* [GC], no. 48939/99, §§ 89-90, ECHR 2004-XII; *Tătar v. Romania*, no. 67021/01, § 88, 27 January 2009); and, by implication, *Guerra and Others v. Italy*, 19 February 1998, §§ 57-60, *Reports of Judgments and Decisions* 1998-I). It has done so, however, with respect to physical persons living in proximity of dangerous activities, with a view to enabling such individuals to assess the risks to their lives, health and physical integrity stemming from exposure to such activities, and to make choices accordingly. Against this background, in the Court's view it would be, once again (see paragraph 216 above), the associations' individual members, as physical persons, who would be directly affected by the impugned omission to provide information complained of (see, *mutatis mutandis*, *Yusufeli İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği*, cited above, § 43).

218. The Court acknowledges the applicant associations' submissions regarding the role they played in denouncing the pollution phenomenon at issue before the governmental and judicial authorities, and also in denouncing the State authorities' failure to protect the lives of their members and the Campania Region's population. In this regard, the Court recognises the vital function of associations as public watchdogs. Moreover, in the circumstances of the present case it does not seek to call into question the contribution that the applicant associations may have had in generating awareness on and denouncing illegal waste disposal practices constituting the *Terra dei*

Fuochi phenomenon. Indeed, the key role played by associations was underlined by the Italian Senate's 12th committee (see paragraph 73 above). That being said, where an applicant association relies exclusively on the individual rights of its members, and without showing it has itself been substantially affected in any way, it cannot be granted victim status under a substantive provision of the Convention.

219. Lastly, as regards the applicant associations' argument to the effect that their members, founders and administrators all reside in municipalities indicated by the domestic authorities as affected by the *Terra dei Fuochi* phenomenon and were directly affected by the situation at issue in the present case, the Court is not persuaded that such individuals were exempt from the obligation to lodge an application with the Court themselves. Indeed, a number of physical persons residing in such municipalities did lodge complaints with the Court in their own name in the present case. Moreover, the Court notes that it was not argued that individual members of the applicant associations suffered from a vulnerability which prevented them from lodging an application with the Court in their own names or were otherwise unable to do so (see *Yusufeli İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği*, cited above, § 42).

220. The Court acknowledges that in *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* ([GC], no. 53600/20, 9 April 2024) it has recently recognised the possibility for associations to be granted standing, subject to a number of very specific conditions, to lodge an application under Article 34 of the Convention as representatives of the individuals whose rights are or will allegedly be affected. However, the Court also made clear that this recognition of standing of associations was justified by "specific considerations relating to climate change" and "the special feature of climate change as a common concern of humankind and the necessity of promoting intergenerational burden-sharing in this context" and limited to "this specific context" (see *Verein KlimaSeniorinnen Schweiz and Others*, cited above, §§ 498-99).

221. In the present case, which is plainly not concerned with the issue of climate change, the Court cannot discern any other "special considerations" (see *Verein KlimaSeniorinnen Schweiz and Others,* cited above, § 475) or "exceptional circumstances" (see *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania* [GC], no. 47848/08, § 112, ECHR 2014) which would lead it to grant standing to the applicant associations to act on behalf of their members, the alleged direct victims, without a specific authority to do so.

222. In view of the above, it follows that the complaints lodged by the applicant associations (applicants nos. 15, 16, 17, 18, and 19) under Articles 2 and 8 are incompatible *ratione personae* with the provisions of the Convention and must be rejected in accordance with Article 35 §§ 3 and 4 thereof.

(b) Individual applicants

(i) The parties' submissions

(α) The Government

223. The Government's objection as regards victim status of individual applicants was two-fold.

224. Under the first limb of their objection, the Government cast doubt on the existence of a proven causal link between the alleged breaches of the Convention and the harm allegedly suffered by the applicants.

225. While arguing that the case ought to be examined under Article 8 of the Convention, the Government submitted that neither that provision, nor any other provision of the Convention specifically guarantees a general protection of the environment as such. According to the Court's case-law, a crucial factor in determining whether, in the circumstances of a case, environmental damage has led to a breach of one of the rights guaranteed by Article 8 is the existence of harmful effects on a person's private or family life, and not simply the general deterioration of the environment (they referred to *Fadeyeva v. Russia*, no. 55723/00, § 88, ECHR 2005-IV, *Di Sarno and Others v. Italy*, no. 30765/08, § 80, 10 January 2012; and *Cordella and Others v. Italy*, nos. 54414/13 and 54264/15, § 100, 24 January 2019).

226. In the Government's view, the Court was required to determine whether there existed a causal relationship between the polluting activity complained of and the adverse repercussions on the applicants. They further argued that the causal relationship between environmental contamination and the negative impact on the life of individuals could not be presumed solely on the basis of the applicants' allegations, but had to be conclusively proven by clear scientific evidence. In the Government's view, the applicants had not furnished evidence of a scientifically proven causal relationship between the exposure to contaminated sites and the onset of cancer. In this connection, the Government argued that, in the case of multifactorial diseases, the decisive influence of other risk factors cannot be ruled out, so that the existence of a causal relationship could not be established with certainty.

227. As to the second limb of the objection, the Government noted that as regards certain applicants (listed under numbers 9, 14, 26, 27, 28, 30, 31, 32, 33, and 34 of Annex I), the alleged direct victims or the deceased relatives of the alleged indirect victims had resided in municipalities that were not included in what they refer to as the *Terra dei Fuochi* area, whose geographical scope had been circumscribed by inter-ministerial directives (see paragraph 7 above). In the Government's view, this ought to lead the Court conclude that the listed applicants did not have victim status within the meaning of Article 34 of the Convention.

(β) The applicants

– *Applications nos. 74208/14 and 21215/15*

228. The applicants referred to the "*Sentieri*" project (see paragraphs 57 and 83 above), which reported high mortality rates for certain cancers and a high prevalence of congenital malformations at birth in certain *Terra dei Fuochi* municipalities. The applicants pointed out that, according to the *Sentieri* studies, the most common tumours were those of the liver, stomach and lung. They also underlined the study's finding as to an excess of hospitalisations for tumours in children in the first year of life. The applicants noted the studies' conclusion to the effect that the various risk factors which may have contributed to causing such diseases included exposure to a combination of environmental pollutants that could be released by illegal hazardous waste disposal sites and/or the uncontrolled combustion of hazardous waste and solid urban waste.

229. The applicants also referred to the 2019 update to the "*Sentieri*" study (see paragraph 83 above), which revealed an excess mortality in both genders, compared to the regional average; an excess of liver cancer was observed in both genders both as a cause of death and as a diagnosis of hospitalisation, an excess of breast cancer, and an excess of hospital admissions for non-Hodgkin lymphoma in children, and an excess of stomach cancer and colorectal cancer in the study area (the

Domizio-Phlegrean coast). The applicants highlighted that, according to the authors of the study, some of these diseases could be associated to exposure to PBCs and dioxin. Finally, they cited the study's recommendation that the decontamination programmes had to be implemented as a matter of urgency and all illegal waste disposal practices were to be immediately stopped.

230. The applicants also referred to the findings of excess mortality rates in the *Terra dei Fuochi* area contained in the 2007 WHO study (see paragraph 21 above)

231. Lastly, the applicants relied on the conclusions of a study published in the Journal of Cellular Physiology in December 2019, in which the authors evaluated the blood levels of toxic heavy metals and persistent organic pollutants in patients with different cancer types residing in different municipalities in the Naples and Caserta provinces by comparison with healthy individuals, and observed high blood concentrations of heavy metals in the blood of individuals living in some municipalities, including the Giugliano municipality, where illegal waste disposal sites had been documented (see paragraph 95 above).

232. From the applicants' perspective, the scientific evidence contained in the cited studies ought to be viewed as a confirmation of a link between illegal waste management practices and the onset of tumours in the *Terra dei Fuochi* area. The pollution to which they were exposed thus constituted a threat to the life of the applicants. It had had harmful consequences for the well-being of the applicants and, given that appropriate measures had not been taken, continued to have such consequences.

233. As regards those of their number who had not developed a particular illness, the applicants argued that victim status could not be ruled out, provided that they demonstrated an increased risk of developing a life-threatening condition. In this respect, relying, *inter alia*, on the Court's judgments in *Budayeva and Others* (cited above) and *Kolyadenko and Others* (cited above), the applicants argued that Article 2 was applicable not only in respect of situations where certain actions or omissions on the part of the State had led to a death, but also to situations where, although an applicant survived, there clearly existed a threat to his or her life.

234. As to the second limb of the Government's objection, the fact that the municipalities affected by the illegal dumping and burning of waste had been officially identified by the inter-ministerial directives cited by the Government did not, in the applicants' view, mean that adjoining municipalities were not affected by the same phenomenon. In turn, this meant that the victim status of applicants living in municipalities not included in the directives ought not to be excluded.

235. The applicants argued that the lists of municipalities contained in the inter-ministerial directive could not be considered exhaustive. Moreover, they pointed out that the applicants who did not live in the officially recognised municipalities resided in those bordering them, or across a bridge or a road from them. The applicants pointed out that some municipalities were "enclaves", in that they were not on the official list but were surrounded on all sides by municipalities that were identified in the inter-ministerial directives. They submitted a map in support of their arguments. The fact that between 2013 and 2015 municipalities were added to the list provided, in their view, additional evidence that the *Terra dei Fuochi* area was not static. In conclusion, they argued it would not be logical to exclude the possibility that the illegal burning of toxic waste has never affected the communities living in the "enclaves" on the map. They noted that applicants nos. 27, 30, 31, and 32,

and 33 lived in municipalities bordered by the municipalities included in the official *Terra dei Fuochi* perimeter.

236. Furthermore, they pointed out that applicant no. 26 lived in a municipality located along the Vesuvian coastline (*area littorale vesuviana*), which encompassed a number of municipalities, of which only three had been formally included in the *Terra dei Fuochi* area. That being said, eleven out of these municipalities had been added, since 2013, to the list of "sites of national interest" (see paragraph 120 above) requiring decontamination. Moreover, the applicants pointed out that the section of the update to the 2019 "*Sentieri*" study focusing on the Vesuvian coastline (see paragraph 83 above) disclosed excess mortality rates for all of the main causes of death, for both genders, compared to the regional average. Based on the foregoing considerations, the applicants argued that it would be artificial to exclude applicant no. 26.

237. In general, as far as environmental contamination was concerned, they argued that it was difficult to define precise boundaries. As an example, they pointed out that contaminants in soil could transfer to water. As to the fires, the applicants argued that it could not be excluded that the toxic fumes released by the illegal incineration of waste in one municipality could reach neighbouring municipalities. Moreover, they pointed out, without further elaboration, that individuals who did not formally reside in official *Terra dei Fuochi* municipalities could spend time in such areas, for example for work.

– *Application no. 51567/14*

238. The applicants observed that applicants nos. 7, 10, 11, 12, and 14 were all affected by health conditions which, they argued, could be linked to diffuse pollution in the context of the *Terra dei Fuochi* phenomenon. They specified that Mr Cannavacciuolo (applicant no. 5 in Annex I) had been found to be contaminated by dioxin in 2007 and submitted documentation to this effect.

239. They disagreed with the Government's statement that individuals who were not affected by a serious health condition ought not to be considered victims of the violations complained of. They argued that the *Terra dei Fuochi* phenomenon exposed all individuals living in the concerned areas to a real and immediate risk to their health, regardless of whether they had developed an illness. These applicants, like those in applications nos. 74208/14 and 21215/15, placed particular emphasis on a study published in December 2019 (see paragraph 95 above); in their view, its findings reinforced the argument that they had been and still were being exposed to environmental pollution.

240. As to the second limb of the Government's objection, the applicants pointed out that applicants nos. 9 and 14 had always lived in municipalities that were not part of the formally identified *Terra dei Fuochi* area, but were surrounded by such municipalities. The applicants referred to the 2018 report by the Senate's 12th Committee, which stated that the list of municipalities identified by the legislation and decrees as forming part of the *Terra dei Fuochi* had been drawn up on the basis of presumptions; this was not be taken as implying that certain areas which were not on that list were unaffected by the phenomenon of pollution (see paragraph 73 above).

(ii) The third-party interveners' submissions

241. Professor F. Bianchi provided an overview of the scientific literature on the possible repercussions of illegal waste management practices in the Campania Region on human health. He highlighted, amongst other research, a biomonitoring study for which results were published in 2014 (see paragraph 51 above) and stressed that the existing literature on the topic revealed health

conditions affecting individuals living in areas characterised by illegal waste management practices, both in municipalities that were included in the *Terra dei Fuochi* official perimeter, and in neighbouring municipalities beyond the officially defined borders. In this connection, he submitted that even people who did not suffer from a particular disease ought to be considered vulnerable, as they are were exposed to environmental pollutants recognised as hazardous for human health, and thus had a higher probability of adverse health outcomes.

242. Mr D'Alisa and Professor Armiero submitted that the *Terra dei Fuochi* phenomenon was not limited to a well-defined perimeter and is, on the contrary, expanding. They submitted a map showing the Casavatore municipality, was is not part of the official *Terra dei Fuochi* list, but was surrounded on all sides by officially recognised municipalities. They argued that it would be unrealistic to exclude the possibility that the illegal burning of waste had not affected the individuals living in municipalities such as Casavatore. They further submitted that soil contamination transferred easily to water, thereby potentially affecting much wider areas.

243. Client Earth submitted that, pursuant to environmental-law principles, the applicability of Article 2 ought not to be excluded with regard to individuals who had not yet developed a specific illness, provided that they were able to demonstrate an increased risk of developing a life-threatening condition. In this connection, they highlighted that the Court had previously held that Article 2 covered not only situations where a certain action or omission on the part of the State led to a death, but also situations where, although an applicant survived, there clearly existed a risk to his or her life, and that Article 2 could be invoked by persons claiming that their life was at risk, although no such risk had yet materialised, when the Court was persuaded that there had been a serious threat to their lives. They referred, in particular, to *Kolyadenko and Others v. Russia* (nos. 17423/05 and 5 others, 28 February 2012).

244. In their view, individuals who were exposed to significant levels of environmental pollution were subjected to a threat to their life for the purposes of Article 2, even if the threat had not yet materialised. They further argued that individuals ought to be able to invoke Article 2 when the State's failure to prevent, reduce and control environmental pollution had resulted in a significant risk of that person developing a serious illness, even if there was still scientific uncertainty as to whether and when such a risk would materialise.

(iii) The Court's assessment

245. The Court considers that the first limb of the objection raised by the Government as regards the victim status of applicants who are physical persons is closely linked to the substance of the applicants' complaints. It therefore joins this issue to the merits.

246. Turning to the second limb of the objection, the Court first reiterates that three inter-ministerial directives delimited the so-called *Terra dei Fuochi* zone, comprising 90 municipalities in the Naples and Caserta provinces affected by illegal waste disposal practices (see paragraph 7 above). The Court further notes that the Government refer, in their observations, to these municipalities as the *Terra dei Fuochi* municipalities, and the individuals living in them as residents in the *Terra dei Fuochi*. Their objection solely concerns the applicants whose residence or that of their deceased relatives falls outside the previously described *Terra dei Fuochi* municipalities.

247. The Court takes note, first, of the Senate Committee's statement, relied on by the applicants, to the effect that the list of municipalities identified in the relevant legislative instruments had been

prepared on the basis of presumptions, which did not mean that certain areas which were not included on this list were unaffected by the phenomenon of pollution (see paragraph 73 above). While not casting doubt on the presumptive foundations of the delimitation of the geographical area at issue, the Court considers that the domestic authorities were undoubtedly in possession of relevant evidence and information which led them to single out the municipalities in question and it is not for the Court to call into question such an assessment, which the authorities were better placed to make.

248. The Court also notes the argument put forward by some of the applicants and third-party interveners that air pollution from incineration and contaminants released in waterways can cross boundaries between municipalities. It also notes submissions to the effect that certain municipalities not included in the official list adjoin, and in certain cases are surrounded, by municipalities included in the list, and that other municipalities, not included in the list, were nonetheless included among the so-called "sites of national interest" (see paragraph 120 above) requiring decontamination. While acknowledging such arguments, the Court finds that it does not have sufficient evidence at its disposal to enable it to conclude that the applicants concerned lived, or that their relatives had lived, in areas affected by the pollution phenomenon at issue in the present case.

249. Accordingly, the Court finds that the complaints lodged by applicants nos. 9, 14, 26, 27, 28, 30, 31, 32, and 33, who have not resided, or whose relatives have not resided in the municipalities listed in the relevant inter-ministerial directives (see paragraph 7 above), are incompatible *ratione personae* with the provisions of the Convention and must be rejected in accordance with Article 35 §§ 3 and 4 thereof.

250. As regards applicant no. 34, the Court notes that he resided in one of the listed municipalities up until 2002 (see Annex I) but had ceased to live there by the time he introduced his application before the Court. For this reason, the Court finds it more appropriate to examine whether the six-month time-limit has been complied with in respect of the complaints lodged by that applicant (see paragraphs 284-295 below).

2. *Non-exhaustion of domestic remedies*

(a) The parties' submissions

(i) The Government

251. The Government submitted that the applicants had failed to exhaust a number of domestic remedies which were, in their view, available and effective at the time the applications were lodged.

252. First, the applicants could have lodged an action for damages under Article 2043 of the Civil Code and Article 185 of the Criminal Code against the individuals responsible for the illegal disposal of waste.

253. In the Government's view all the applicants could have lodged proceedings against local and central authorities to complain against omissions in relation to waste disposal and environmental pollution. In order to substantiate their arguments as to the effectiveness of such a remedy, the Government referred to four judgments issued by the Rome District Court (see paragraph 138 above).

254. The Government contended that the applicants could have joined criminal proceedings as civil parties. The Government noted that this avenue for redress was relevant in particular with regard to one of the applicants, Mr Cannavacciuolo (applicant no. 5), as he had joined criminal proceedings

against individuals identified as being responsible for the illegal disposal of waste in the Acerra municipality. The fact that one set of proceedings to which Mr Cannavacciuolo was a party were discontinued because the applicable statutory limitation periods had expired did not exclude the possibility for the injured parties to submit their claim for damages before the civil courts. In this connection the Government drew the Court's attention to a set of criminal proceedings in which the entitlement of the civil parties, including Mr. Cannavacciuolo (applicant no. 5), to compensation had been recognised (see paragraphs 148-151 above).

255. The Government further argued that the applicants had not availed themselves of the complaint procedure provided for in Articles 309 and 310 of Legislative Decree No. 152 of 3 April 2006 (see paragraph 135 above). Through this remedy, coupled with the subsequent filing, where necessary, of an appeal against the inaction by the relevant administrative authority, the applicants could have obtained the adoption, by the Ministry of the Environment, of the measures necessary to prevent or mitigate environmental damage. In support of their contention, the Government cited judgment no. 676 of 8 February 2012, issued by the Campania Regional Administrative Court for Campania (see paragraph 139 above).

256. Finally, the Italian Government argued that the applicants could have initiated a "class action against the public administration" under Law no. 15 of 4 March 2009, as implemented by Legislative Decree no. 198 of 20 December 2009 (see paragraph 137 above). In this regard, the Government cited the case-law of different regional administrative courts which had clarified the scope of the administrative action at issue (see paragraphs 140 to 142 above). The Government further made a general statement to the effect that in *Viviani v. Italy* (dec.) (no. 9713/13, § 11, 25 March 2015), the Court had declared a case inadmissible for failure to exhaust the remedy at issue.

257. In conclusion, and relying on the Court's case-law in *De Ciantis* (cited above), the Government submitted that the existence of mere doubts on the applicants' part as to the prospects of success of a particular remedy was not a valid reason for failing to exhaust that remedy.

(ii) The Applicants

(α) Applications nos. 74208/14 and 21215/15

258. The applicants reiterated that, in accordance with its well-established case-law, the Court must take realistic account not only of formal remedies available in the domestic legal system, but also of the general legal and political context in which they operated.

259. They contended that none of the remedies listed by the Government would have provided an adequate response to the breaches complained of. They reiterated that they did not seek financial reparation and that their complaints hinged on the authorities' long-standing failure to protect their health and the environment, and mitigate the consequences of the pollution. Moreover, they stated that the pollution phenomenon persisted. They emphasised, in particular, their complaints about the inadequacy of measures taken to decontaminate the territory in question.

260. In the light of the foregoing considerations, and noting the absence of any relevant case-law precedents submitted by the Government, the applicants argued that no criminal, civil or administrative action would have allowed them to obtain a judicial decision providing an overarching solution to the pollution affecting the area in which they lived. They relied on the Court's conclusions in *Cordella* (cited above, §§ 121-127).

261. Turning specifically to the Government's contention that the applicants could have brought an action for damages before the civil courts, they noted that a favourable ruling would not have led to the removal of waste or decontamination of the areas concerned. That being said, the applicants considered that the Government had in any event failed to demonstrate that such a remedy would have offered them reasonable prospects of success. As to the judgments by the Rome District Court submitted by the Government, they noted that these did not concern the *Terra dei Fuochi* area and were proceedings aimed at obtaining specific compensation. In addition, the cases concerned a well-defined area, the Sacco River Valley, in respect of which a state of emergency had been declared, which was not the case for the *Terra dei Fuochi* municipalities. Therefore, in the applicants' view, the cases cited by the Government were not relevant for the purposes of the present case.

262. As to administrative remedies, the applicants stressed that the Government had not submitted case-law in which the domestic courts ordered decontamination of the areas under scrutiny. As regards, in particular, the complaint mechanism provided by Legislative Decree no. 152 of 2006 (see paragraph 135 above), the applicants pointed out that, under this provision, individuals could merely invite the Minister of the Environment to take action. They pointed out that the Minister of the Environment was under no obligation to do so. Based on the foregoing considerations, and relying on a similar conclusion reached by the Court in *Di Sarno* (cited above, § 89), the applicants argued that the remedy at issue did not constitute an effective one for the purposes of Article 35 of the Convention.

263. Finally, as regards the collective public action under Law no. 15 of 2009 and Legislative Decree no. 189 of 2009, the applicants considered that this was of no relevance to the present case.

(β) Application no. 51567/14

264. The applicants submitted that there had been no effective criminal, civil, or administrative remedies available to them in respect of their complaints. The applicants emphasised that their complaints hinged on the inadequacy of protective measures taken by the authorities in response to the pollution problem, such as decontamination of the polluted areas.

265. As to the Government's contention that the applicants could have brought an action for damages before the civil courts, they noted at the outset that the Court had already dismissed a similar objection in *Di Sarno* (cited above, § 87), in connection with the so-called waste crisis in Campania. While such an action could theoretically have led to an award of damages, it would not have adequately addressed the large-scale pollution phenomenon at the heart of the applicants' complaints. Even assuming that a pecuniary award would have constituted appropriate redress, the applicants argued that the Government had failed to demonstrate that the given remedy would have offered the applicants reasonable prospects of success. The applicants considered that the Government had limited themselves to providing copies of judgments concerning civil actions lodged by certain owners of agricultural land in the Latium region. They did not, however, submit any decision by a civil court recognising damages to individuals living in areas affected by the *Terra dei Fuochi* phenomenon.

266. As regards the complaint mechanism provided by Legislative Decree no. 152 of 2006 (see paragraph 135 above), the applicants pointed out that, under this provision, only the Minister of the Environment could seek compensation for environmental damage and individuals could merely invite the Minister to initiate judicial proceedings. Referring to *Di Sarno* (cited above, § 89), the

applicants argued that the remedy at issue could not constitute an effective remedy for the purposes of Article 35 of the Convention.

267. Lastly, the applicants did not accept that a collective public action under Law no. 15 of 2009 and Legislative Decree no. 189 of 2009 (see paragraph 137 above) was a remedy to be exhausted. They considered that such a remedy was aimed at ensuring that public authorities respected their obligations *vis-à-vis* consumers and concerned judicial review of the quality of services provided by public authorities. They contended that, in any event, this legal avenue could not have led to decontamination of polluted areas.

(b) The third-party interveners' submissions

268. Macro Crimes invited the Court to be mindful of the complexity and peculiar nature of the so-called *Terra dei Fuochi* phenomenon when examining the issue of domestic remedies. In the interveners' view, such complexity stemmed from a number of factors: its duration over several decades, the serial nature of the illegal activities, the different means of illegal waste disposal practices (abandonment, dumping, burial, and burning of different types of waste, including hazardous or special waste, the chemical composition of which was highly variable), the interplay between environmental crimes and corruption, its diffuse nature, the extent of environmental contamination and, finally, the plurality of the sources of pollution present across large portions of the Campania Region.

(c) The Court's assessment

269. The Court reiterates that the obligation to exhaust domestic remedies requires an applicant to make normal use of remedies which are available and sufficient in respect of his or her Convention grievances. The existence of the remedies in question must be sufficiently certain not only in theory but in practice, failing which they will lack the requisite accessibility and effectiveness (see *Vučković and Others v. Serbia* [GC], no. 17153/11, § 71, 25 March 2014; and *Communauté genevoise d'action syndicale (CGAS) v. Switzerland* [GC], no. 21881/20, §§ 138-143, 27 November 2023). To be effective, a remedy must be capable of directly redressing the impugned state of affairs and must offer reasonable prospects of success (see *Balogh v. Hungary*, no. 47940/99, § 30, 20 July 2004; and *Sejdovic v. Italy* [GC], no. 56581/00, § 46, ECHR 2006-II).

270. There is, however, no obligation to have recourse to remedies which are inadequate or ineffective (see *Akdivar and Others v. Turkey*, 16 September 1996, § 67, Reports 1996-IV and *Vučković and Others*, cited above, § 73).

271. The Court further reiterates its consistent case-law, according to which an appeal to a higher authority which does not give the person making it a personal right to the exercise by the State of its supervisory powers cannot be regarded as an effective remedy for the purposes of Article 35 of the Convention (see *Horvat v. Croatia*, no. 51585/99, § 47, ECHR 2001-VIII; *Belevitskiy v. Russia*, no. 72967/01, § 59, 1 March 2007; and, *mutatis mutandis*, *Petrella v. Italy*, no. 24340/07, §§ 28-29, 18 March 2021).

272. As regards the burden of proof, the Court reiterates that it is incumbent on the Government claiming non-exhaustion to satisfy the Court that a remedy was an effective one, available in theory and in practice at the relevant time. Once this burden has been satisfied, it falls to the applicant to establish that the remedy advanced by the Government was in fact exhausted, or was for some reason inadequate and ineffective in the particular circumstances of the case, or that there existed

special circumstances absolving him or her from this requirement (see, amongst many other authorities, *Akdivar and Others*, cited above, § 68; *Demopoulos and Others v. Turkey* (dec.) [GC], nos. 46113/99 et al, § 69, ECHR 2010; *McFarlane v. Ireland* [GC], no. 31333/06, § 107, 10 September 2010; and *Vučković and Others*, cited above, § 77).

273. The Court considers, first of all, that those remedies whose purpose is to grant economic reparation, such as an action for damages under the Italian Civil Code, cannot be considered adequate in respect of the applicants' complaints. The Court notes that the applicants complain about an ongoing situation of diffuse pollution and the State's long-standing failure to take action not only to prevent this pollution but also to mitigate its consequences, such as decontamination of polluted areas and the removal of waste. It follows that such remedies would not be capable of directly addressing important aspects of the applicants' grievances. It notes in this respect that the outcome of the civil proceedings referred to by the Government was the award of damages to the plaintiffs (see paragraph 138 above).

274. As to the possibility of lodging a complaint with the Ministry of the Environment under Article 309 of Legislative Decree no. 152 of 2006 (see paragraph 135 above), the Court notes that this avenue represents no more than the submission of information to a supervisory organ with an invitation to make use of its powers, but that full discretion on the use of such powers remains with the Ministry. Indeed, if the relevant administrative authority remains inactive, the scope of the administrative courts' review is limited to verifying whether the Ministry of the Environment complied with its obligation to respond to a complaint, with no impact on the Minister's sphere of discretion as to whether the measures sought by a complainant are warranted. In view of the foregoing, the Court concludes that the complaint mechanism cited by the Government does not give the person using it a personal right to the exercise by the State of its supervisory powers and cannot be regarded as an effective remedy.

275. Even assuming that the remedy at issue was an effective one, the Court highlights that the Government have failed to provide an example of a complainant actually having succeeded in obtaining environmental protection measures by using the procedure in question. Indeed, the Court notes that the only decision produced by the Government in connection with this complaint mechanism relates to a failure by the Minister of the Environment to respond, in a timely manner, to a complaint lodged under the relevant provisions. In that decision, the Campania Regional Administrative Court ordered that the Ministry of the Environment provide the applicants with a reply within a specific deadline (see paragraph 139 above). In doing so, it pointed out that the Ministry retained full discretion as to whether to take action on the damage reported. No information about the concrete outcome of this decision, which was delivered in 2012, has been provided by the Government.

276. As regards the option of lodging a public class action under Legislative Decree no. 198 of 2009 (see paragraph 137 above), the Government made a generic statement to the effect that in *Viviani*, cited above, the Court had declared the case inadmissible for failure to exhaust the remedy at issue. However, the Court notes that in the present case the Government limited themselves to stating that this avenue existed and highlighted a number of general interpretative principles developed by the administrative courts as to its scope (see paragraphs 140 to 142 above) without, however, explaining how this remedy would have operated in practice and how it would have been capable of

addressing the applicants' complaints. Moreover, the Court points out that the domestic case-law cited in this connection by the Government concerns the failure to adopt specific administrative acts relating to the payment of social benefits to public servants in the educational sector, the adoption by a municipality of a quality service charter, and the issuing of residence permits (see paragraphs 140 to 142 above). It was not explained how these cases would be of relevance to the situation complained of in the present case. In view of the foregoing, the Government have failed to persuade the Court that the remedy at issue was capable of providing redress in respect of the applicants' complaints.

277. It follows from the above that the Government's objection must be dismissed.

3. *Six-month time-limit*

(a) The parties' submissions

(i) The Government

278. The Government argued that the six-month time-limit ought to run from the date on which the facts or measures complained of arose, or from the date on which the applicant was or should have been aware of the facts or measures or their effects. They relied, amongst other authorities, on *Mole v. Italy*, no. 24421/03, § 31, 12 January 2010.

279. The Government's position was that the six-month period started to run for all the applicants from the date of knowledge of the potential risks to which they were exposed. According to the Government, the Court, in its *Di Sarno* judgment on the "waste crisis" in Campania, dated this crisis back to 2005 and 2008. Alternatively, they argued that the six-month period started to run, at the latest, from the occurrence of adverse effects, namely the onset of a tumour in the case of direct victims, or the death of a close relative as a result of a tumour allegedly caused by the situation of environmental contamination in the case of indirect victims. In the Government's view, all of the complaints had therefore been submitted outside the six-month time-limit.

(ii) The applicants

280. The applicants in application nos. 74208/14 and 21215/15 argued that their complaints reflected a continuing situation. In support of their argument, the applicants cited an update of the "*Sentieri*" study published in June 2019, which revealed an increase in pathologies associated with exposure to PBCs and dioxin (see paragraph 83 above). They further cited a newspaper article published on 21 December 2019 reporting statements by the Minister of the Environment to the effect that, in the summer of the same year, the blazes were still "poisoning" the daily lives of thousands of citizens.

281. The applicants in application no. 51567/14 made a general statement to the effect that the situation complained of, which reflected a large-scale pollution phenomenon, could not be equated to an instantaneous act but, rather, amounted to a continuing situation. They relied on the Court's case-law establishing that, where the alleged violation constitutes a continuing situation, it is only when the situation ends that the six-month period starts to run.

(b) The Court's assessment

(i) General principles

282. The Court reiterates that, as a rule, the six-month period runs from the date of the final decision in the process of exhaustion of domestic remedies. Where it is clear from the outset however that no effective remedy is available to the applicant, the period runs from the date of the acts or measures complained of, or from the date of knowledge of that act or its effect on or prejudice to the applicant

(see *Varnava and Others v. Turkey* [GC], nos. 16064/90, 16065/90, 16066/90, 16068/90, 16069/90, 16070/90, 16071/90, 16072/90 and 16073/90, § 157, ECHR 2009). It is therefore a matter for the Court to determine, given what is at stake, when an applicant intending to lodge a complaint before it should lodge that complaint (ibid, § 169). Where the alleged violation constitutes a continuing situation against which no domestic remedy is available, the six-month period starts to run from the end of the continuing situation (see *Ülke v. Turkey* (dec.), no. 39437/98, 1 June 2004). As long as the situation continues, the six-month rule is not applicable (see *Iordache v. Romania*, no. 6817/02, § 50, 14 October 2008; and *Svinarenko and Slyadnev v. Russia* [GC], nos. 32541/08 and 43441/08, § 86, ECHR 2014 (extracts)).

(ii) Application to the present case

283. The Court notes that applicants nos. 5, 7, 10, 11, 12, 21, 24, 25, and 34, who lodged their application before the Court as direct victims, do not complain about an instantaneous act but, rather, allege a violation consisting of a continuing situation stemming from a large-scale phenomenon of pollution and a persistent failure by the Italian State to adopt adequate measures to address it. In the instant case given that the state of affairs complained of cannot be considered to have ceased at the time of the lodging of the applications before the Court (see, for example, paragraphs 73 and 99 above), the situation must be viewed as a continuing one for the applicants residing in the officially identified *Terra dei fuochi* municipalities (see paragraph 7 above). It follows that the Government's objection must be dismissed insofar as applicants nos. 5, 7, 10, 12, 21, 24, and 25 are concerned.

284. The Court notes, on the other hand, that applicants nos. 11 and 34 did not reside in the identified *Terra dei fuochi* municipalities at the time of the lodging of the application, as also pointed out by the Government, but had resided in such municipalities only up to a certain point in time. In particular, applicant no. 34 stopped living in one of such municipalities in 2002 and applicant no. 11 moved to a different region in Italy in 2011 (see Annex II). For these applicants, and in the absence of sufficient evidence for the Court to conclude that the municipality where applicant no. 34 moved to was affected by the pollution phenomenon at issue (see paragraph 248 above), the situation complained of may be regarded as having ceased for them when they stopped living in the officially identified municipalities.

285. The Court further notes that applicants nos. 6, 8, 13, 20, 22, 23, and 29 lodged their applications as indirect victims, on behalf of family members who died before the applications were lodged with the Court. As regards these applicants, it may be stated that the situation complained of ceased for their relatives on the date of their death. The Court notes that in the cases of certain applicants, a considerable period of time elapsed between their relatives' death and the lodging of their application, in some cases even exceeding ten years (see Annex I).

286. Given that there were no effective remedies to be exhausted, the six-month period in these cases would have to run from the moment the applicants became aware of the effects of the situation complained of on them or, in the case of the indirect victims, on their relatives. In the circumstances of the present case, this point would be when they had become sufficiently aware that they or their relatives had been exposed to a risk to their lives and health as a result of the pollution phenomenon complained of.

287. Turning to specific facts which may assist it in identifying a relevant point in time, the Court makes the following observations.
288. It notes that in October 2013 the Italian Parliament declassified the statements made in October 1997 by the *collaboratore di giustizia* C. S. to the Italian Parliament, revealing the existence of a large-scale and systematic phenomenon of illegal disposal of hazardous waste going back to the late 1980s (see paragraph 40 above). Until that declassification these statements had been protected as a State secret. The Court finds this moment particularly relevant, in that the declassification of the above-mentioned statements attracted extensive media attention and generated public awareness about the extent and scale of a key aspect of the phenomenon, at least in so far as it concerned the illegal practices of burying and dumping hazardous waste by organised criminal groups.
289. The Court further notes that the first parliamentary response which sought to address the pollution phenomenon at issue was Decree-Law no. 136 of 10 December 2013 (see paragraph 103 above). The instrument's title reflected, *inter alia*, the need to introduce measures to address situations of "environmental emergency". In its preamble, the decree-law referred to the extremely serious health and environmental situation characterising areas of the Campania Region. The Court further finds it relevant to point out that, in official documents published by the Italian Parliament, the decree was described as having introduced provisions to address a "serious environmental emergency" in parts of the Naples and Caserta provinces, in the territory known as the *Terra dei Fuochi* (see paragraph 43 above).
290. The Court highlights that the decree-law provided for the introduction of "urgent and extraordinary" measures aimed at the protection of health and the clean-up of contaminated sites in areas of Campania, which were to be subsequently defined by means of an inter-ministerial directive (see paragraph 291 below). It was in this instrument that the authorities began to talk for the first time about mapping efforts to detect the presence of contaminants explicitly linked to the illegal dumping, burial and incineration of waste, at least in so far as agricultural land was concerned. The Court finds the enactment of this decree particularly significant in that it constituted a form of official recognition by the State of the large-scale nature of the problem and the urgent need to address the illegal dumping, burial and incineration of waste, while at the same time making it explicit that related measures to protect health had to be introduced as a matter of urgency.
291. Soon after the decree's enactment, on 23 December 2013, an inter-ministerial directive listed fifty-seven municipalities in the provinces of Naples and Caserta that were to be placed under investigation (see paragraph 7 above). In the Court's view, the fact of issuing of this directive made the acknowledgment of the phenomenon more concrete, by beginning to circumscribe specific areas and naming individual municipalities affected by the pollution phenomenon at issue, which required urgent action on the part of the authorities.
292. In view of the above considerations, the Court finds that the end of 2013 should be viewed as the moment at which the applicants ought to have had sufficient awareness that they or their relatives had been exposed to a risk to their lives and health as a result of the situation complained of. Therefore, in the particular circumstances of the case, and bearing in mind that Article 35 of the Convention must be interpreted with some flexibility, the Court considers that the date of 31 December 2013 should be used as the starting point for calculating the six-month time-limit in relation to those applicants whose relatives deceased prior to that date, as well as those applicants

who had stopped living in one of the identified *Terra dei fuochi* municipalities (see paragraph 284 above).

293. The Court notes that the family members of applicants nos. 6, 8, 13, 22, 23, and 29 died before 31 December 2013. The Court therefore considers that they should have lodged their application with the Court within six months of the latter date, that is, before 30 June 2014. The Court notes that applicants nos. 6, 8, and 13 lodged their application before the Court on 12 November 2014 and applicants nos. 22, 23, and 29 lodged their application on 27 October 2014. It follows that the Government's objection on the basis of failure to comply with the six-month time-limit must be upheld in respect of these applicants.

294. As regards the applicants whose relatives died after 31 December 2013, the Court considers that the six-month time-limit started running from the date of their relatives' death. The Court notes that the relative of applicant no. 20 died on 29 January 2014 and the application was lodged on 27 October2014. It follows that the Government's objection must also be upheld in respect of applicant no. 20.

295. The Government's objection must, moreover, be upheld in respect of applicants nos. 11 and 34, who ceased to live in one of the identified *Terra dei Fuochi* municipalities before 31 December 2013 but lodged their application with the Court on 12 November 2014 and 15 April 2015 respectively.

296. In view of the above, the Court declares the complaints lodged under Articles 2 and 8 of the Convention by applicants nos. 6, 8, 11, 13, 20, 22, 23, 29 and 34 inadmissible for failure to comply with the six-month time-limit.

4. Applicability of the relevant Convention provisions

297. In respect of the remaining applicants (nos. 5, 7, 10, 12, 21, 24 and 25), an issue that remains to be determined is the applicability of the Convention provisions invoked by them. While the Government have not raised an objection as regards the applicability of Article 2 of the Convention, arguing instead that the case ought to be examined solely from the standpoint of Article 8, the Court considers that it has to address this issue of its own motion (see *Studio Monitori and Others v. Georgia*, nos. 44920/09 and 8942/10, § 32, 30 January 2020). The Court reiterates that the question of applicability is an issue pertaining to the Court's jurisdiction *ratione materiae*, and for this reason, as a general rule, the relevant analysis should be carried out at the admissibility stage, unless there is a particular reason to join this question to the merits (see *Denisov v. Ukraine* [GC], no. 76639/11, § 93, 25 September 2018). In the present case, the Court considers that the issue of applicability is closely bound up with issues it will have to consider when examining the substantive aspects of the State's obligations and responsibility under the Convention (see, in respect of the complaint under Article 2, paragraphs 384-392 below), as well as those concerning the applicants' victim status, which have already been joined to the merits (see paragraph 245 above). Accordingly, it finds it appropriate to examine the issue of applicability of the relevant Convention provisions in the context of its assessment of the merits of those provisions.

5. Conclusions on admissibility

298. The Court notes that the complaints brought by applicants nos. 5, 7, 10, 12, 21, 24, and 25 under Articles 2 and 8 of the Convention are neither manifestly ill-founded nor inadmissible on any other grounds listed in Article 35 of the Convention. They must therefore be declared admissible. In

respect of the other applicants these complaints have been declared inadmissible (see paragraphs 222, 249, and 296 above).

B. Merits

1. Alleged violation of Article 2

(a) The parties' submissions

(i) The Applicants

(α) Application no. 74208/14

299. The applicants complained about their exposure to an ongoing situation of diffuse pollution and the State's long-standing failure to take action not only to prevent this pollution but also to mitigate its consequences, such as decontamination. They emphasised, in this connection, that the authorities had not adequately protected their lives and health. They pointed out that they had all contracted cancer.

300. The applicants drew the Court's attention to the declassification, on 31 October 2013, of statements made by the *collaboratore di giustizia* ("C.S.") who had informed the Italian Parliament in 1997 about the existence, since at least 1988, of a large-scale practice of burying toxic, industrial, and generally hazardous waste. According to the applicants, the document disclosed that these practices had been going on for years in the area where the applicants lived, that the Italian authorities had been aware of this but had remained inactive and had also kept this information covered by State secrecy. The applicants also emphasised that the transcripts showed that the national and district Anti-mafia Directorates had been aware of the illegal practices since at least 1993, given that C.S. stated he had provided evidence to them and had further cooperated with police investigators by leading them to sites where waste had been buried. The applicants cited a specific passage of C.S.'s statements to the effect that toxic waste had been buried as deep as 20 metres below ground and had reached the aquifers.

301. The applicants disagreed with the Government's submissions that Italy had adopted all appropriate measures and expressed reservations as to whether the measures listed by the Government had been introduced in a timely manner, given the time that had elapsed between C.S.'s statements in 1997 and enactment of the so-called *Terra dei Fuochi* decree on 10 December 2013.

302. As an overarching argument, the applicants contended that, for the most part, the measures listed by the Government existed only "on paper" or concerned mere planning of activities, and that, in any event, the measures introduced had been adopted in an untimely manner. In particular, the applicants argued that some initiatives, such as the 2013 Agreement for the *Terra dei Fuochi* (see paragraph 38 above) and the 2018 Memorandum of Understanding (see paragraph 78 above) were purely policy documents, containing measures that had not been implemented in practice.

303. The applicants submitted that, despite the authorities' awareness of the situation, as described above, the first mapping efforts concerning agricultural land were envisaged only in 2013, with the Ministerial Directive of 23 December 2013, that is, more than twenty years after the authorities were first informed about the situation. This instrument was followed by two others, in 2014 and 2015. Nevertheless, the applicants contended that the mapping of the areas defined by the relevant texts was not sufficient, as there were many municipalities that were affected by the same problems but were not included in the official *Terra dei Fuochi* list.

304. The applicants reiterated certain findings by the Senate's 12th Committee in 2018 (see paragraph 73 above), which, when the report was drafted, had drawn attention to insufficient monitoring of air, soil, and water.

305. The applicants produced newspaper articles published between August and November 2019 containing reports which, in their view, confirmed the persistence of the *Terra dei Fuochi* phenomenon.

306. The applicants further commented on the report submitted by the Government finding that in the landfills in the Bortolotto-Sogeri area, leachate losses had been detected from reservoirs which flowed into the stormwater drainage channel (see paragraph 75 above). The applicants noted with concern that in the same part of their observations, the Government had reported that the identification of certain polluted areas had still not begun in 2018.

307. The applicants expressed scepticism concerning the effectiveness of some of the measures to tackle the illegal burying and incineration of waste listed by the Government. They cited, as an example, surveillance cameras, arguing that such cameras had not been installed in all the areas concerned and those that had did not function properly. To substantiate their argument, they submitted articles showing cameras surrounded by piles of accumulated garbage. One of the submitted articles discussed the difficulties encountered by law-enforcement agencies in catching the individuals responsible for setting waste on fire, as they used 'hit and run' tactics and frequently placed fake licence plates on their vehicles, so that even if caught on camera they could not be traced.

308. They submitted that the so-called *Terra dei Fuochi* phenomenon, once considered an emergency, had developed into a situation of normality. They argued that fires continued to burn and illegal dumping and burying of waste had not decreased. Over one hundred fires had been reported by the press in the summer of 2019. The applicants produced press articles reporting that in January 2020 an illegal landfill, described in one article as a "lake of toxic waste" had been discovered in the municipality of San Felice Cancello in the Caserta province. In their view, this supported their argument that the illegal conduct at issue was still occurring, was not being halted and revealed the Government's inability to protect the exposed population for over thirty years.

309. Lastly, they argued that the State authorities had failed to provide them with information concerning the dangers to their health arising from the pollution.

(β) Application no. 51567/14

310. The applicants argued that the authorities had been aware of a real and immediate risk to the lives and health of individuals living in areas affected by the *Terra dei Fuochi* phenomenon since at least 1988. In this connection, they quoted several findings from the report of 11 March 1996 by the commission of inquiry set up in 1995; these mentioned the presence of multiple illegal dumping sites in the provinces of Caserta and Naples, controlled by organised criminal groups at local level, and the fact that no supervision or land clean-up plan had been put in place, although the phenomenon of illegal burying and dumping of hazardous waste dated back to at least 1988 (see paragraph 10 above).

311. The applicants submitted that the Italian authorities had not done all that could reasonably have been expected of them to comply with their positive obligations under Articles 2 and 8, in that they had failed to adopt adequate preventive and protective measures.

312. The applicants argued that those of their number with serious health issues had diseases which could be considered related to exposure to the *Terra dei Fuochi* phenomenon. They mentioned the existence of several studies indicating that mortality rates in the municipalities in which they lived had increased steadily over the years, and that certain cancers, including lymphoma and leukaemia, were more common in such municipalities when compared to the rest of Italy. They cited the findings of the WHO study (see paragraph 25 above) and other studies on the health impact of the *Terra dei Fuochi* phenomenon (see paragraphs 17, 95, and 51 above). The applicants cited a number of the CJEU's key findings in its judgments of 26 April 2007, 4 March 2010 and 16 July 2015 (see paragraphs 26, *31* and *56* above). The CJEU had identified a number of breaches of EU law and held that even the accumulation of large quantities of rubbish along public roads and in temporary storage areas exposed the health of the local inhabitants to certain danger.

313. The applicants also contended that the Italian authorities had not done enough to identify and monitor contaminated land, and had not carried out adequate decontamination efforts. As regards the latter measures, they further submitted that the resources allocated for their implementation had not been used in an effective and efficient manner.

314. The applicants also cited a journalistic investigation conducted in 2019, the results of which were aired on Italian State television ("RAI") on 29 June 2019 with the title "Between Naples and Caserta: the land of the blind". This revealed an increase in illegal incineration of waste and toxic material at the time.

315. With regard to their complaint under Article 8, the applicants mainly referred to their submissions on Article 2. They reiterated that the Italian State had, in their view, failed to ensure adequate patrolling and monitoring of the areas affected by the *Terra dei Fuochi* phenomenon. These alleged shortcomings, coupled with a failure to decontaminate the polluted areas, had led, in the applicants' view, to a violation of the substantive limb of Article 8.

316. The applicants also stressed that, under the Court's case-law, Article 2 entailed a duty for the State to ensure, by all means at its disposal, an adequate response – judicial or otherwise – so that the legislative and administrative framework set up to protect the right to life was properly implemented and any breaches of that right were repressed and punished. In this connection, the applicants alleged that the Italian State had not complied with this obligation. They argued that the relevant criminal-law provisions gradually introduced into the Italian legal framework were inadequate to address the *Terra dei Fuochi* phenomenon. In their view, criminal investigations in this area did not lead to the identification and punishment of those responsible, essentially on account of the short statutory limitation periods for the offences in question.

317. Lastly, in the applicants' view, the Italian authorities had failed to comply with their positive obligation to inform them, over several decades, of the risks to their health arising from the pollution phenomenon at issue.

(ii) The Government

318. The Government made an overarching observation to the effect that the measures listed in their pleadings and the supporting documents ought to lead the Court to conclude that all appropriate measures had been taken to protect the applicants' rights under Articles 2 and 8 of the Convention. That said, they invited the Court to examine the cases solely under Article 8.

319. The Government then proceeded to list the measures taken by the authorities. They began by addressing measures taken in connection with ascertaining the areas affected by the pollution phenomenon and the degree of contamination. They summarised the legislation and other instruments adopted in connection with the *Terra dei Fuochi* phenomenon. In particular, they submitted information about the legislation providing for the mapping of agricultural land in the Campania Region with a view to detecting the presence of contaminants due to illegal dumping, disposal and burning of waste (Decree-Law no. 136/2013, converted into Law no. 6/2014; and the Ministerial Directives of 23 December 2013, 16 April 2014 and 10 December 2015). The Government also provided details of the mandate of the Working Group set up pursuant to Decree-Law no. 136/2013 and the different tasks identified as necessary to carry out that mandate (see paragraph 111 above).
320. In terms of tangible actions taken, the Government pointed out that, at the date the observations were drafted, direct investigations consisting of soil, plant and water sampling of land parcels classified under risk categories 5, 4, 3 and 2a had been conducted. The Government submitted several documents detailing the progress made in this connection (see, in particular, paragraphs 100 and 101 above).
321. As regards the creation of registers of areas affected by the abandonment and incineration of waste, as provided by section 3 of regional law no. 20 of 9 December 2013 (see paragraph 42 above), the Government stated that this was the responsibility of the municipalities and that seven municipalities had set up the registers by the time that the observations were drafted.
322. Turning to measures to examine the impact of pollution on health and to address the related risks to health, the Government made an overarching reference to a note published by the Campania regional administration, which they attached to their observations along with forty-seven annexes, some of which were untitled, others undated, and others contained data without an accompanying analysis. In the text of their observations, the Government singled out the “Transparent Campania Integrated Monitoring Programme”, launched by the Campania Region and led by the IZSM, the purpose of which was to obtain data on human exposure to pollutants on a regional scale and to promote a “culture of transparency” in the spheres of food safety and the environment (see paragraph 55 above). They referred to food-monitoring activities conducted under this programme, and in particular the “QR code project” (see paragraph 52 above). They stated that under the latter project the IZSM had tested 30,000 samples of food items produced by companies which operated in the *Terra dei Fuochi* area and had volunteered to submit to the scheme, and that only seven instances of non-conformity had been detected. They further noted that a key component of the Transparent Campania programme involved human biomonitoring and, in this connection, referred to the SPES study (see paragraph 52 above).
323. The Government listed three additional health studies, namely the “Exposure study on the population affected by pathologies” (“the SPEM”), the “Exposure study for occupational diseases” (“the SPEL”) and the GEMMA study (see paragraph 85 above). The Government further mentioned the setting up of an information platform to manage and monitor cancer screening (see paragraph 80 above).

324. The Government pointed out that on 10 October 2016 the Campania Regional Council had adopted an Action Plan to combat the illegal dumping and incineration of waste, and listed the health-related measures envisaged by that plan (see paragraph 66 above).
325. The Government also pointed out that cancer registries had been set up within all the local health authorities in the Campania Region. Without specifying the number or specific locations, they stated that childhood cancer registries and birth defects registries had been created. They added that the Campania Region had launched an initiative to develop an "Atlas of mortality for the Campania Region" (see paragraphs and 85 and 96 above). The Government concluded that the entire population of the Campania Region was under cancer surveillance.
326. The Government cited the Special Commissioner's Decree no. 38 of 1 June 2016, which provided for the strengthening of oncological screening programmes and the implementation of diagnostic and therapeutic treatment plans for cancer patients (see paragraph 62 above).
327. The Government mentioned the existence of a Memorandum of Understanding, signed on 23 June 2017 between the Campania Region, the regional child cancer registry, the cancer registries of the Caserta and Naples local health authorities, the epidemiological service of the Caserta and Naples 3 South local health authorities, the IZSM, the ARPAC and the S. Maria Capua Vetere Prosecution Service, with a view to adopting joint strategies for assessing possible health risks connected to environmental concerns in areas under the jurisdiction of the S. Maria Capua Vetere prosecution service (see paragraph 69 above).
328. The Government then provided information about measures introduced to prevent the illegal dumping and incineration of waste. Particular reference was made to the 2016 Action Plan (see paragraph 66 above), and to some of the measures, or "actions" foreseen under this plan. The Government noted that EUR 4,500,000 had been allocated to setting up the so-called operational centres. The creation of four such centres had been foreseen in four municipalities. According to the Government, as of June 2019 three of these centres had actually been set up, and were operational for twenty-four hours a day, seven days a week (including public holidays). A fourth centre had been set up within the SMA Campania headquarters. According to the Government, two of these centres became operational in October 2017.
329. The Government pointed out that EUR 8,700,000 had been allocated to the implementation of measures for the detection of abandoned waste under the corresponding heading of the Action Plan. In terms of tangible actions, they specified that SMA Campania personnel carried out regular patrolling activities. These activities were carried out in collaboration with army personnel and the aim was to report fires, illegal rubbish tips and other risk situations. Funds had been allocated for the purchase of drones, to be used by SMA Campania personnel and for the purchase of equipment by the Carabinieri police force (including drones avionics laboratories and mobile devices on which to install reporting applications).
330. The Government also pointed out that a Memorandum of Understanding had been signed between the National Fire Corps and the Region on measures for putting out fires; under this agreement, each operational centre would be assigned a team of five firefighters who were ready to intervene in the event of fires being reported. Funds had been allocated in 2019 for the purpose of extending the presence of these firefighting teams for one year. In 2019, further funds had been

allocated for implementation of this "action", some of it for the purchase of avionics equipment by the State Police and some to ensure the continued functioning of the operational centres.
331. The Government submitted that EUR 1,150,000 had been earmarked in 2019 for the "immediate cleaning and removal" of waste where there existed a "high probability that it would be set on fire".
332. The Government referred to the Protocol of Understanding for the "Experimental Implementation" of the Action Plan signed in 2018 between the Campania Region and different Government ministries (see paragraph 78 above). They drew the Court's attention to the section of the Protocol delineating further actions aimed at preventing illegal incineration practices. Under this Protocol, a working group had been set up for the purposes of making the I.TER information system accessible to a wider range of users, including the National Police, the Fire Corps, and the prosecution offices, and ensuring its compatibility with other information systems used to collect and process data, including data collected by drones, sensors and surveillance cameras. The Government drew the Court's attention to the Periodic Report on the Action Plan, dated 7 August 2019, issued by the Coordination Unit of the Action Plan (see paragraph 88 above).
333. The Government further mentioned the Ministerial Decree of 26 November 2012, whereby the Minister of the Interior provided for the appointment of a Vice-Prefect as the Delegated Official (see paragraph 34 above) and submitted a report published by the Delegated Official on 14 June 2019 (see paragraph 82 above). In their additional observations of 26 May 2021, the Government submitted a further report published by the Delegated official on 4 January 2021 (see paragraph 99 above) in order to substantiate their arguments to the effect that actions had been undertaken to combat the illegal incineration of waste.
334. The Government further argued that Italy had acted in a rigorous, timely, and effective manner in terms of repressing criminal activities, initiating legal proceedings, punishing those responsible, and repairing the environmental damage caused by criminal conduct. In support of this argument, they cited seven sets of proceedings, as detailed below, asserting that the listed cases concerned criminal offences set out in Article 260 of Legislative Decree no. 152 of 2006 and Articles 434 and 439 of the Italian Criminal Code (see paragraphs 128 and 130 above).
335. The Government cited proceedings no. 3313/12 against D.B. and others before the Santa Maria Capua Vetere District Court. They claimed that the proceedings in question related to illegal trafficking of waste in an industrial complex in the Aversa municipality, where hazardous waste was mixed with non-hazardous waste by modifying the identification codes for different categories of waste. The Government stated that in a judgment of 17 December 2015 the Santa Maria Capua Vetere District Court had discontinued the proceedings on account of expiry of statutory limitation periods. They further stated, without providing supporting documentation, that expert technical reports were being drafted with a view to the initiation of civil proceedings. The Government did not submit a copy of the judgment, other than the operative part declaring the proceedings time-barred.
336. The Government further cited proceedings no. 50653/04, against M.R. and others before the Naples District Court, Pozzuoli section. These proceedings concerned charges of illegal waste trafficking, under Article 260 of Legislative Decree no. 152/2006, against the owners of a number of waste recovery plants located in different parts of Campania. According to the Government, the companies in question had been involved in the illegal disposal of approximately

1,071,637,648 kilograms of waste from thirty-five municipalities located in the indicated areas, a process which was made possible by unlawfully modifying waste disposal codes. On 22 February 2013 the Naples District Court, Pozzuoli Section, sentenced nine individuals to various terms of imprisonment and ordered them to pay damages to the civil parties, including the Ministry of the Environment, to be obtained via separate civil proceedings. An appeal had been lodged against the district court's judgment, but at the time the observations were drafted in September 2019, a hearing had not yet been scheduled. The Government did not submit a copy of the judgment's reasoning, but only the operative part of the Naples District Court's judgment (Pozzuoli Section). No information was subsequently provided about the progress or outcome of the appeal.

337. The Government further drew the Court's attention to the Naples Court of Appeal judgment no. 680/2015 of 23 April 2015 and the judgment of the Court of Cassation, Criminal Section I, no. 58023 of 7 May 2017 (see paragraph 148 above). The Court of Cassation had upheld the conviction of three individuals who were convicted of trafficking large quantities of waste, between 2001 and 2005, in the Acerra municipality. In particular, they were found responsible for illegal management of composting companies, leading to environmental damage as defined in Article 434 of the Criminal Code. Without providing supporting documentation, the Government stated that the ISPRA had assessed the damage caused to the environment at EUR 3,794,900. An attachment order had been issued by the Naples District Court in respect of companies, land, buildings, vehicles, aircraft and bank accounts owned by C.P., G.P. and S.P. According to the Government, the order had been enforced by the Naples Revenue Police on 14 February 2017.

338. The Government mentioned criminal proceedings no. 24961/10, lodged with the Naples Assize Court against R.A. and others, which concluded with judgment no. 14/16 of 11 January 2017. They further mentioned a judgment delivered on 17 January 2019 by the Naples Assize Court of Appeal in relation to the same proceedings, which concerned illegal waste disposal activities at a landfill in the Giugliano in Campania municipality. These activities had caused serious damage to the environment and, in particular, had led to the contamination of groundwater from the storage, over time, of large quantities of hazardous industrial waste. On 17 January 2019 the Naples Assize Court of Appeal sentenced an individual to ten years' imprisonment for water contamination under Article 439 of the Criminal Code and ordered that he pay damages to the Ministry of the Environment. The Government stated that the Ministry of the Environment intended to initiate civil proceedings.

339. The Government cited criminal proceedings no. 47098/13, lodged against N.P., W.S. and L.D. before the Northern Naples District Court, which concluded with judgment no. 685/18 of 21 March 2018. The proceedings in question concerned the pollution of groundwater through the dumping, since the mid-1980s, of about 150,000 cubic metres of waste in the Casal di Principe municipality and the burying of such waste approximately 10 metres below ground. On 21 March 2018 the Northern Naples District court declared that it did not have jurisdiction to hear the case and referred it to the Santa Maria Capua Vetere District Court, before which proceedings were pending. No information about the further conduct of these proceedings has been provided.

340. Lastly, the Government cited criminal proceedings no. 56063/09, lodged with the Santa Maria Capua Vetere District Court against G.A. and others, which concluded with judgment 1951/18 of 28 March 2014. They further mentioned judgments delivered by the Naples Court of Appeal and the

Court of Cassation in relation to the same set of proceedings. At the close of the proceedings a number of individuals had been held responsible for the offence of illegal trafficking of waste and were sentenced to pay damages to the Ministry of the Environment, with the amount to be quantified in separate civil proceedings. The Government stated that the ISPRA, at the request of the Ministry of the Environment, had carried out an assessment of the environmental damage caused by the criminal conduct in question, which entailed the illegal disposal of land from riverbeds and sewage sludge, by falsifying information (such as waste disposal codes) required for the management of such waste, between 2004 and 2008, in the Marcianise municipality. According to the Government, the ISPRA had quantified the damage as amounting to EUR 235,000,000, and in August 2018 the Revenue Police (*Guardia di finanza*) assessed the convicted individuals' financial situation with a view to assisting the Ministry of the Environment in bringing civil proceedings. No information about the further conduct of these proceedings has been provided.

341. The Government then provided information about the measures adopted to decontaminate the affected areas. They first described the measures taken at the national level. In this connection, they pointed out that the "2019 Budget Law" which provided for the adoption of a National Reclamation Programme (see paragraph 79 above) and increased the funds assigned to the "implementation of environmental measures" in, amongst others, contaminated areas in what they refer to as the *Terra dei Fuochi*.

342. The Government specified that approximately EUR 20 million per year had been earmarked for the period 2019-2024 for such purposes. In this connection, the Ministry of the Environment had identified a number of activities that it considered necessary to prepare the national plan, including, as a priority, the identification of standardised criteria for ranking contaminated sites, in order to prioritise decontamination activities. A task force had been set up in April 2019 to develop these criteria. One of the task force's first activities was a survey of the criteria and indicators used at regional level to develop the rankings of contaminated sites, to be used as a basis on which to develop nationally applicable criteria. According to the Government, the task force met on 3 September 2019 and agreed to examine various case studies in order to start an initial testing activity. This would enable it to identify exactly what information was needed to define the priority criteria that were to be adopted in the national decontamination programme. The Government stressed the importance of this testing phase in order to identify reliable criteria at the national level. The Government specified that a list of test sites had been drawn up and that it was envisaged that by the end of 2019 the national programme would be adopted.

343. The Government turned to the measures taken at the regional level. They cited a Memorandum of Understanding signed on 2 October 2017 between the Campania Region and Invitalia (see paragraph 70 above), aimed at the implementation of safety and decontamination measures in areas defined in the Regional Reclamation Plan (see paragraph 39 above). The Government reproduced a table setting out a number of activities and interventions listed in connection with sixteen *Terra dei Fuochi* municipalities. These activities include rendering safe a number of illegal rubbish tips and the subsequent decontamination of the area concerned; the classification and decontamination of agricultural land identified under Law no. 6/2014 (see paragraph 103 above); the removal of waste from different sites, including solid urban waste from temporary storage sites, as well as preliminary soil testing and the required safety and decontamination measures. The Government stated that

tender documents for the allocation of environmental classification and decontamination activities were being published.

344. Lastly, the Government submitted that the Campania Region had undertaken to assume decontamination activities from those municipalities which did not have the resources or equipment needed to carry them out. Without providing further explanation or detail, the Government stated that other decontamination measures were being carried out directly by individual municipalities, using regional funding.

345. The Government then addressed the measures adopted to tackle shortcomings in management of the waste cycle. The Government began by summarising some key aspects of the proceedings against Italy before the CJEU regarding waste management in Campania.

346. As to concrete measures taken, the Government highlighted that a new "Regional Plan for the Management of Urban Waste in Campania" had been adopted by the Regional Council in 2016 (see paragraph 67 above) and that the programme focused on household waste separation (*raccolta differenziata*) and the construction of waste-to-energy plants. The Government noted that the Campania Region had launched a EUR 200 million programme under this plan to build composting plants. Without providing further details, they stated that municipalities had responded positively to a public notice issued in May 2016 concerning the latter programme. They further noted the introduction of an "Extraordinary programme for the removal of waste bales" and referred to the joint progress report on the Regional Plan for the Management of Urban Waste by the Director General for the Waste Cycle of the Campania Region and the Director General for Waste and Pollution of the Ministry of the Environment (see paragraph 77 above). The Government stressed that EUR 294 million had been allocated in 2016 and 2017 for the implementation of the programme in the officially designated *Terra dei Fuochi* municipalities.

347. The Government also drew the Court's attention to the enactment of Law no. 14 of 26 May 2016 (*Norme di attuazione della disciplina europea e nazionale in materia di rifiuti*), referred to as the "Regional Law on the waste cycle" (see paragraph 61 above).

348. As regards the Campania Region's waste treatment capacity, the Government argued that the requirements to build new plants, as set out in the CJEU's 2015 judgment, had been based on data which were not up to date and which took into account neither the recent developments nor the enactment of the Regional Plan for Waste management. The Government noted that the Permanent Representation of Italy to the EU had requested that the daily penalty be reduced by one third, given that certain measures had already been introduced.

(b) The third-party interveners

(i) The Forum for Human Rights & Social Justice (Newcastle University), the Newcastle Environmental Regulation Research Group (Newcastle University), Let's Do It! Italy and Legambiente

349. The third-party interveners provided an overview of what they considered to be important features of the *Terra dei Fuochi* phenomenon.

350. They began by focusing on the first aspect of the phenomenon, namely, the illegal trafficking of waste. In their view, this partly stemmed from the limited capacity of Italian facilities to dispose of urban, industrial and hazardous waste. They pointed out how the *Camorra*, a criminal organisation, had created joint ventures with companies in Northern and Central Italy, with the aim of transforming waste management into an illegal business which, according to the environmental

NGO *Legambiente*, generated over 1200 billion Italian lire per year in the 1990s. The same NGO estimated that the illegal waste business run by the *Camorra* had a turnover of over EUR 16.7 billion in 2013.

351. They cited a 2015 *Legambiente* report which stated that between 1991 and 2015 eighty-two judicial investigations relating to the illegal waste business had been opened in Campania (see paragraph 53 above). They stressed that the same report estimated that, over the course of twenty-three years, 10 million tonnes of waste, including hazardous waste, had been illegally disposed of in Campania.

352. As to the second aspect, the illegal burning of waste, they submitted that its causes could be identified, *inter alia*, in the shortcomings affecting the urban waste cycle, which led to the accumulation and abandonment of urban solid waste, coupled with the illegal dumping of industrial waste by local steel plants, textile plants and tanneries. In support of the latter statements they referred to the statements made by the Delegated Official to the fifth parliamentary Commission of inquiry on 21 October 2015 (see paragraph 58 above).

353. They submitted that the extent of the problem of illegal burning of waste was clear from data available from the Ministry of the Interior, indicating that 14,457 fires had been registered between 2012 and 2018 in municipalities in the Naples and Caserta provinces. These fires affected municipalities within and outside the boundaries of the officially delimited *Terra dei Fuochi* area. They also submitted that the illegal burning of waste has contributed to the environmental degradation of Campania and led to the dispersion into the atmosphere and subsequent deposition into the soil of toxic pollutants such as dioxins.

354. Moreover, what they labelled an "environmental disaster" in Campania had been exacerbated by two main factors, namely, the absence of what they referred to as a "precautionary approach" with respect to addressing and removing all sources of environmental pollution harmful to human health, and the lack of an effective legal framework to tackle environmental offences.

355. With regard to the first factor, they argued that despite the fact that environmental non-governmental organisations, such as *Legambiente*, had been urging since 1997 that a legal framework be introduced to tackle environmental crimes, the first environment-related criminal offence was created only in 2001. They reviewed the introduction of criminal-law provisions on combatting environmental damage in Italy and submitted that, until recently, most environmental crimes in Italy had been minor offences and that this had had an impact on the deterrent effect of legislation. In this connection, they pointed out that minor offences carried shorter statutory limitation periods.

356. With regard to the second factor, the third-party interveners argued that there was evidence of serious delays in assessing the risk that contaminated sites posed to human health, and slow progress in the decontamination activities of affected sites in Campania. They referred to the Campania Regional Council's progress report on the implementation status of the Regional Decontamination Plan for 2018 (see paragraph 80 above). Of the sites identified as requiring investigation of pollutants harmful to human health, formal procedures for conducting a risk analysis had begun for only 25% of the sites in question, and only 3.5% of these sites had been cleaned up.

357. They further noted that information on the extent of the illegal waste business in Campania had been covered by State secrecy until 2013. They pointed out, in this connection, that the UN

Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste had stressed that health and safety information about toxic chemicals must never be confidential.

358. The third-party interveners further submitted that regional human-rights courts and international human-rights bodies were increasingly relying on environmental-law standards and principles when assessing human-rights violations. They focused, in particular, on the prevention principle and the precautionary principle, reiterating that a lack of scientific certainty about the actual or potential effects of an activity should not prevent States from taking appropriate measures to prevent environmental damage. They cited Advisory Opinion no. OC-23/18, issued by the Inter-American Court of Human Rights, in which that court considered the precautionary principle to be relevant in the determination of whether a State had complied with its duties under the American Convention on Human Rights. They also noted that, in the Inter-American Court's view, States had to act in accordance with the precautionary principle, even in the absence of scientific certainty, and adopt measures to prevent serious or irreversible damage to the environment.

359. The third-party interveners further pointed out that the right to a healthy environment had gained constitutional recognition and protection in more than one hundred States, including Italy.

(ii) Client Earth

360. The third-party intervener submitted that individuals affected by environmental pollution faced several challenges when seeking legal redress, such as detection of its existence, identification of its sources (which were often multiple), and the establishment of causal links between pollution and health impacts.

361. The nature of pollution, together with the related scientific uncertainties, had therefore been addressed by the development of legal concepts in the framework of environmental law, requiring lawmakers and courts to take a proactive and protective approach. In this connection, the principle of prevention enshrined a duty to prevent, reduce, and control pollution and environmental harm. It was based on an awareness that the harm caused by pollution to human health and environment was often irreversible. The precautionary principle was a tool used to overcome scientific uncertainty about risks to human life and health, or to the environment. It was very closely linked to the principle of prevention. Its importance lay in ensuring protection at an early stage and lowering the evidentiary standard of risk.

362. The third-party intervener submitted that both principles were recognised in UN declarations and customary international law, and were also enshrined in various international conventions to which Italy was a party, concerning air pollution, water pollution and waste management.

363. Relying on *Tătar* (cited above), it pointed out that the Court had previously identified the precautionary principle as a source of relevant international law, and had relied on it in the legal reasoning in cases involving environmental pollution.

364. The third-party intervener argued that, pursuant to the principle of prevention, as soon as a body of scientific evidence emerged indicating the existence of a threat to human life and health, States were obliged to take active steps to prevent and mitigate environmental pollution. Moreover, under the precautionary principle, even if the existence or extent of certain risks were not certain, this did not justify inaction but required States to err on the side of caution.

365. Client Earth emphasised the work of the UN Special Procedures of the Human Rights Council, including the Special Rapporteur on human rights and the environment and the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes.

366. The third-party intervener submitted that collecting information about environmental pollution was the first, essential, step to protect life and the health of a population effectively. Once this information had been collected, it had to be made available to the public. The intervener submitted that a State's obligation to collect and disseminate information applied continuously, and independently of a specific decision-making procedure. If environmentally harmful conduct was being carried out without official authorisation, as in the present case, a State's positive obligation to monitor the situation and provide the population with information related to the protection of their health acquired even greater significance. It drew the Court's attention to Article 5 § 1 (c) of the Aarhus Convention (see paragraph 182 above).

367. The third-party intervener further submitted that such an obligation not only required dissemination of the information held by a public authority, but also required the authorities to collect information proactively. It pointed out that, according to the Aarhus Convention Implementation Guide, active collection and dissemination of information implied a sense of urgency that certain types of information should reach the public. While the basic obligation was to make environmental information available "progressively", the Aarhus Convention imposed a clear obligation to "disseminate immediately and without delay" all information "which could enable the public to take measures to prevent or mitigate harm arising" from "any imminent threat to human health or the environment", whether it was caused by human activities or due to natural causes. This provision sought to ensure that individuals were informed of any risks to their health arising from polluting activities, so they could take the necessary precautions and/or apply to the relevant authorities for urgent measures.

(iii) Macro Crimes

368. The third-party intervener submitted that the reports of the parliamentary commissions of inquiry issued since 1995 (see paragraphs 10, 13, 28, and 74 above), as well as the report of the Senate's 12th Committee (see paragraph 73 above), contained precise accounts of the pollution in the area affected by the illegal burying and burning of waste, coupled with alarming data on the statistical increase in cancers, which was confirmed by a number of epidemiological studies. It is therefore undeniable that the State was not only aware of the serious phenomenon under consideration but was even, on the initiative of its own parliamentary commissions, constantly informed of developments.

369. The third-party intervener submitted that the epidemiological data available, obtained from studies specifically carried out in the areas affected by the phenomenon under consideration, such as the *Sentieri* study, had disclosed an increase in the incidence of diseases which international scientific literature linked to substances released into the environment by hazardous waste (see paragraphs 57 and 83 above). In their view, this amounted to evidence that there existed a risk that the population exposed to pollution generated by the illegal disposal of such waste would contract potentially fatal diseases.

(iv) G. D'Alisa (University of Coimbra) and Professor M. Amiero (KTH institute of Technology, Sweden)

370. The third-party interveners submitted that the State authorities had known about the involvement of organised criminal groups in the trafficking of toxic waste since at least the mid-1990s, but had decided to keep this information secret, focusing instead on the so-called "waste emergency", related to shortcomings in the disposal of urban waste.

(v) Professor F. Bianchi (National Research Council, Pisa, Italy)

371. The third-party intervener submitted that illegal waste disposal practices by organised criminal groups, resulting in illegal dumping and open-air burning of urban and hazardous waste, had been documented since the early 1980s. By the end of the 1990s, a portion of the different types of waste produced in the Campania Region, and large amounts of hazardous waste brought to Campania from other regions, had been disposed of and illegally incinerated for approximately two decades.

372. The third-party intervener drew the Court's attention to scientific publications which, as early as 2004, had reported excess rates of mortality, morbidity and congenital anomalies in those parts of Campania affected by illegal waste disposal practices (see paragraph 18 above). With particular regard to a study published at the end of 2004, he highlighted, amongst other points, that cancer mortality had significantly increased, particularly for certain types of cancer, in the study area (that is, the Giugliano in Campania, Qualiano and Villaricca municipalities). He noted that the area in question was characterised by the documented presence of unauthorised rubbish tips, where waste was also burned, and by sites where industrial waste had been illegally buried (see paragraph 19 above). He also cited the results of the study conducted by WHO at the request of the National Civil Defence Department between 2005 and 2008 (see paragraphs 21 and 25 above) and other scientific articles which strengthened the hypothesis of an association between residing in areas affected by uncontrolled waste disposal and various adverse effects on human health.

373. In the third-party intervener's view, the available knowledge gathered between 2004 to 2008 on the association between illegal waste disposal practices and health, albeit descriptive and not pointing to definite causal links, was nonetheless sufficient to trigger a precautionary approach. This entailed the need for the authorities to introduce protective public health measures.

374. He further highlighted that even people who did not suffer from a particular disease could be considered vulnerable in health terms, because increased exposure to environmental factors recognised as hazardous for health meant that they had a higher probability, or risk, of adverse health outcomes.

(c) The Court's assessment

(i) Relevant principles

375. The Court reiterates that Article 2 of the Convention does not solely concern deaths resulting from the use of force by agents of the State but also, in the first sentence of its first paragraph, lays down a positive obligation on States to take all appropriate steps to safeguard the lives of those within their jurisdiction (see, among other authorities *L.C.B. v. the United Kingdom*, 9 June 1998, § 36, *Reports of Judgments and Decisions* 1998-III; *Öneryıldız v. Turkey* [GC], no. 48939/99, § 71, ECHR 2004-XII, and *Budayeva and Others*, cited above, § 128). Moreover, this Article, read as a whole, covers not only situations where certain action or omission on the part of the State led to a death complained of, but also situations where, although an applicant survived, there clearly existed a risk to his or her life (see, *mutatis mutandis*, *Makaratzis v. Greece* [GC], no. 50385/99, §§ 49-55,

ECHR 2004-XI, and *Kolyadenko and Others v. Russia*, nos. 17423/05 and 5 others, § 151, 28 February 2012).

376. The Court has considered that this obligation must be construed as applying in the context of any activity, whether public or not, in which the right to life may be at stake (see, among others, *Öneryıldız*, cited above, § 71; and *Brincat and Others v. Malta*, nos. 60908/11 and 4 others, § 101, 24 July 2014). The Court has held that the obligation to take all appropriate steps to safeguard life applies *a fortiori* in the context of activities which may pose a risk to human life due to their inherently hazardous nature. These have included the operation of waste-collection sites (see *Öneryıldız*, cited above, § 71), nuclear testing (see *L.C.B. v. the United Kingdom*, cited above, § 36), and the management of a water reservoir in a region prone to heavy rains and typhoons (see *Kolyadenko*, cited above, § 164).

377. It has also considered that, in order for Article 2 to apply in the context of an activity which is, by its very nature, capable of putting an individual's life at risk, there has to be a "real and imminent" risk to life. It may be impossible to devise a general rule on what constitutes a "real and imminent" risk to life, as that will depend on the Court's assessment of the particular circumstances of a case (see, *mutatis mutandis*, *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* [GC], no. 53600/20, §§ 511-12, 9 April 2024). However, the Court's case-law indicates that the term "real" risk corresponds to the requirement of the existence of a serious, genuine and sufficiently ascertainable threat to life (ibid., § 512, with further references). The "imminence" of such a risk entails an element of physical proximity of the threat and its temporal proximity (ibid., with further references).

378. In establishing whether the authorities were under a positive obligation to take all appropriate steps to safeguard life, the Court has also considered whether the national authorities knew or ought to have known that the applicants had been exposed to a threat to life (see *Öneryıldız*, cited above, § 101; *Brincat*, cited above, § 105; and, *mutatis mutandis*, *Vilnes and Others v. Norway*, (nos. 52806/09 and 22703/10, §§ 222-23, 5 December 2013).

379. Once the latter has been established the Court's task is to determine whether, given the circumstances of the case, the State did all that could have been required of it to prevent the applicant's life from being avoidably put at risk (see *L.C.B. v. the United Kingdom*, cited above, § 36).

380. The Court reiterates that the positive obligation to take all appropriate steps to safeguard life for the purposes of Article 2 entails, firstly, a primary duty on the State to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life (see *Öneryıldız*, cited above, § 89, and *Budayeva and Others*, cited above, § 129).

381. As to the choice of particular operational measures aimed at the protection of citizens whose lives might be endangered by the inherent risks posed by dangerous activities, the Court has consistently held that where the State is required to take positive measures, the choice of means is in principle a matter that falls within the Contracting State's margin of appreciation (see *Öneryıldız*, cited above, §§ 71 and 90). There are different avenues to ensure Convention rights, and even if the State has failed to apply one particular measure provided by domestic law, it may still fulfil its positive duty by other means. In this respect an impossible or disproportionate burden must not be imposed on the authorities without consideration being given, in particular, to the operational choices which they must make in terms of priorities and resources; this results from the wide margin of appreciation States enjoy, as the Court has previously held, in difficult social and technical spheres

(see *Budayeva and Others*, cited above, §§ 134-35, and the authorities cited therein). The Court has also noted, in certain contexts, that in order for measures to be effective, it is incumbent on the public authorities to act in good time, in an appropriate and consistent manner (see, as an example, in the context of climate change, *Verein KlimaSeniorinnen Schweiz and Others*, cited above, § 548).

382. The Court has also held that among preventive measures particular emphasis should be placed on the public's right to information (see *Öneryıldız*, cited above, §§ 89-90, and *Budayeva and Others*, cited above, § 132). In relation to Article 8, the Court has affirmed that there is a positive obligation on States to provide access to essential information enabling individuals to assess risks to their health and lives (see *Guerra and Others*, cited above, §§ 57-60; *López Ostra*, cited above, § 55; *McGinley and Egan v. the United Kingdom*, 9 June 1998, §§ 98-104, *Reports of Judgments and Decisions* 1998-III; and *Roche v. the United Kingdom* [GC], no. 32555/96, §§ 157-69, ECHR 2005-X). The Court has accepted that this obligation may, in certain circumstances, also encompass a duty to provide such information (see *Verein KlimaSeniorinnen Schweiz and Others*, cited above, § 538; *Brincat and Others*, cited above, § 102; *Vilnes and Others*, cited above, § 235, and *L.C.B. v. the United Kingdom*, cited above, §§ 38-41; and *Tătar*, cited above, § 122). It has also recognised that in the context of dangerous activities, the scope of the positive obligations under Articles 2 and 8 of the Convention largely overlap (see *Brincat and Others*, cited above, § 102).

(ii) Application to the present case

(α) Whether the authorities were under an obligation to protect the applicants' lives

383. In light of the above principles, the Court's task is, firstly, to determine whether the authorities were under an obligation to take appropriate steps to safeguard the lives of the applicants.

384. The Court acknowledges at the outset that the present case differs from those environmental cases that have concerned a single, identified, circumscribed source of pollution or activity causing it, and a more or less limited geographical area (see, among other examples, *López Ostra v. Spain*, 9 December 1994, Series A no. 303; *Fadeyeva v. Russia*, no. 55723/00, ECHR 2005-IV; *Giacomelli v. Italy*, no. 59909/00, ECHR 2006-XII; *Ledyayeva and Others v. Russia*, nos. 53157/99 and 3 others, 26 October 2006; *Tătar*, cited above; *Dubetska and Others v. Ukraine*, no. 30499/03, 10 February 2011; and *Kotov and Others v. Russia*, nos. 6142/18 and 13 others, 11 October 2022) or the exposure to a particular substance which is released by a clearly identifiable source (see, for example, *Brincat and Others*, cited above). In the present case, the Court is confronted with a particularly complex and widespread form of pollution occurring primarily, but not exclusively, on private land. As already noted, in the words of the Italian Senate, the so-called *Terra dei Fuochi* phenomenon is characterised by a multiplicity of sources of pollution which are very different as to their type, their geographical extension, the pollutants released, the ways in which individuals came into contact with them, and their environmental impact (see paragraph 73 above). Moreover, the Court underlines that the present case does not concern dangerous activities, such as industrial activities, carried out against the backdrop of an existing regulatory framework, as in the majority of cases that have come under its scrutiny. On the contrary, the present case concerns activities carried out by private parties, namely organised criminal groups, as well as by industry, businesses and individuals, beyond the bounds of any form of legality or legal regulation. The Court will bear these considerations in mind in its assessment of whether protective obligations under Article 2 were triggered in the present case. In this connection, it reiterates that its approach to the interpretation of Article 2 is guided by the

idea that the object and purpose of the Convention as an instrument for the protection of individual human beings requires its provisions to be interpreted and applied in such a way as to make its safeguards practical and effective (see, amongst many other authorities, *Öneryıldız*, cited above, § 69).

385. Turning to its assessment, the Court first considers that there can be no doubt that the illegal and therefore completely unregulated dumping, often accompanied by incineration, and burying of hazardous waste in issue in the present case are inherently dangerous activities which may pose a risk to human life. The seriousness of the potential harm for human health stemming from such activities, which affect all environmental elements such as soil, water, and air, appears to be undisputed between the parties.

386. The Court notes, in addition, that the Government did not appear to contest that exposure to toxic substances, such as those released into the environment as a result of the pollution phenomenon under scrutiny, and which included known carcinogens such as dioxins and heavy metals, entails a risk to life and health. Rather, the Government focused their arguments on the lack of a scientifically proven causal relationship between exposure to the pollution at issue and the onset of a specific disease with respect to individual applicants or their deceased relatives.

387. The Court considers that there is ample evidence in the case file suggesting that the national authorities knew about the existence of the dangerous activities described above, and in particular the illegal dumping and burying of hazardous waste, from at least the early 1990s, if not earlier. It is clear from different documents in the case file that criminal investigations into such practices had been launched as far back as the early 1990s (see paragraphs 10, 16 and 35 above). Moreover, in 1997 the *collaboratore di giustizia* C.S. confirmed to the Italian Parliament the existence of large-scale and systematic practices of illegally burying and dumping hazardous waste, in several parts of Campania, which had begun in the late 1980s (see paragraph 40 above). C.S., who had first-hand knowledge of these practices due to his role in one of the criminal organisations perpetrating them, also confirmed to Parliament that evidence of these practices had been made available to law-enforcement authorities from as early as 1993 (see paragraph 40 above). In 1996 and 1998, the first parliamentary commission of inquiry reported on the presence of multiple illegal dumping sites in the provinces of Naples and Caserta and noted that the phenomenon of burying and dumping hazardous waste was increasing in certain areas (see paragraphs 10 and 13 above). It further appears from the documents on file that between 2000 and 2002 approximately 980 illegal rubbish tips were recorded across the Naples and Caserta provinces (see paragraph 16 above). As regards the practice of illegally incinerating waste, the Court notes that according to the material on file, illegal combustion of waste in areas of Campania, and in particular in the Naples and Caserta provinces, had been known to the Italian Parliament at least since 2004 (see paragraphs 16 and 17 above), although illegal incineration practices in certain municipalities had already been reported by the environmental NGO *Legambiente* in 2003 (see paragraph 5 above).

388. The Court further observes that the Italian Parliament was made aware as early as 1996 by its first commission of inquiry that there were rising cancer rates in certain parts of Campania (see paragraph 10 above). In 1998, after noting an increase in cancers in the province of Caserta, the same commission of inquiry had urged that possible links between this increase and the illegal dumping of hazardous waste in that province be investigated (see paragraph 14 above). In 2004 and 2005

studies were published disclosing rising cancer incidence and mortality rates in the areas of Campania that were characterised by illegal waste disposal and the existence of illegal rubbish tips (see paragraphs 18, 19 and 21 above). Although these initial studies did not disclose a definite, direct correlation between exposure to the pollution generated by illegal waste disposal practices and the onset of certain diseases, they raised credible prima facie concerns about serious, potentially life-threatening health implications for the affected citizens, individually and collectively, into which further research was urged as a matter of priority.

389. The Court cannot but observe, moreover, that in 2011 the US Navy issued precautionary measures to its personnel living and working in certain areas of the Naples and Caserta provinces, despite the noted limited availability of information from the Italian authorities and the need for further investigations on the nature and extent of environmental contamination in those areas (see paragraph 32 above).

390. On the basis of the foregoing elements, and bearing in mind the particular nature of the pollution phenomenon at issue and the conduct giving rise to it (see paragraph 384 above) the Court accepts the existence of a "sufficiently serious, genuine and ascertainable" risk to life to engage Article 2 of the Convention and trigger a duty to act on the authorities' part. The Court also accepts that the risk may be considered "imminent" in the terms established by the Court's case-law (see paragraph 377 above) given the applicants' residence, over a considerable period of time, in municipalities identified by the State authorities as being affected by the pollution phenomenon at issue, which had been ongoing, omnipresent and unavoidable for decades and had not ceased at the time the applications were lodged with the Court. Being satisfied that the applicants were exposed to a risk thus described, the Court does not consider it necessary or appropriate to require that the applicants demonstrate a proven link between the exposure to an identifiable type of pollution or even harmful substance and the onset of a specific life-threatening illness or death as a result of it (contrast *Brincat*, § 83).

391. The Court further takes the view that, in line with a precautionary approach (see *Tătar*, cited above, § 120), given that the general risk had been known for a long time (see paragraphs 387 and 388 above), the fact that there was no scientific certainty about the precise effects the pollution may have had on the health of a particular applicant cannot negate the existence of a protective duty, where one of the most important aspects of that duty is the need to investigate, identify and assess the nature and level of the risk (see, *mutatis mutandis*, *Kurt v. Austria* [GC], no. 62903/15, § 159, 15 June 2021; also see paragraph 395 below). To find otherwise in the specific circumstances of the present case, would entail that State authorities could rely on a failure to comply or delays in complying with a duty in order to deny its very existence, thereby rendering the protection of Article 2 ineffective.

392. In view of the above, the Court concludes that Article 2 is applicable in the present case and that the States' positive obligations under that Article required the domestic authorities to take all appropriate steps to safeguard the lives of the applicants residing in the so-called *Terra dei Fuochi* municipalities as delimited by the inter-ministerial directives, which the authorities themselves identified as being affected by the pollution phenomenon at issue (see paragraph 7 above).

393. The Court will now turn to determining the scope of the obligations incumbent on the State authorities and assess whether the authorities complied with such obligations.

(β) Whether the authorities took measures which were adequate under the circumstances

394. The Court reiterates that the scope of the obligations incumbent upon the State authorities in a given context depends on the origin of the threat, the kind of risks concerned and the extent to which one or the other risk is susceptible to mitigation (see *Budayeva and Others*, cited above, §§ 136-37; *Kolyadenko*, cited above, § 161; and *Smiljanić v. Croatia*, no. 35983/14, § 70, 25 March 2021).

395. In the context of the present case, the Court considers that the authorities were, first and foremost, under a duty to undertake a comprehensive assessment of the pollution phenomenon at issue, namely by identifying the affected areas and the nature and extent of the contamination in question, and then to take action in order to manage any risk revealed. They were further expected to investigate the impact of this pollution phenomenon on the health of individuals living in areas affected by it. At the same time, the authorities could have reasonably been expected to take action to combat the conduct giving rise to the pollution phenomenon, namely the illegal dumping, burying and incineration of waste. The authorities were further under an obligation to provide individuals living in areas affected by the pollution phenomenon with timely information enabling them to assess risks to their health and lives.

396. The Court further reiterates that, in their choice of specific practical measures to comply with their obligations, national authorities enjoy a wide latitude, also in light of the complex operational choices which they must make in terms of priorities and resources (see, *mutatis mutandis*, *Budayeva and Others,* cited above, §§ 134-35). This is all the more so considering, as already noted several times, that the pollution phenomenon under scrutiny is characterised by an exceptional degree of complexity (see paragraph 73 above). That being said, it is within the Court's sphere of competence to assess whether the authorities approached the problem with the required diligence given the nature and seriousness of the threat at issue. In this respect, the Court stresses that the timeliness of the authorities' response acquires primordial importance (see *Verein KlimaSeniorinnen Schweiz*, cited above, § 538). It further considers that the nature and seriousness of the threat required a systematic, coordinated, and comprehensive response on the part of the authorities.

397. Against this background, the Court will turn to assessing the measures taken by the authorities, as submitted by the Government.

– *Measures to identify polluted areas and verify the levels of air, soil and water pollution*

398. The Court considers at the outset that identification of the areas affected by the pollution and ascertaining the extent of the given environmental contamination is a necessary prerequisite both for any meaningful assessment of health risks and for defining the measures to manage such risks.

399. As an overarching consideration, the Court notes that, in their observations, the Government have relied almost exclusively on measures introduced after the enactment of Decree-Law no. 136 in December 2013, converted into Law no. 6 of 2014. The Government placed considerable emphasis on the fact that the 2013 Decree-Law provided for the mapping of agricultural land in the Campania Region with a view to detecting the presence of contamination linked to the illegal dumping, burying and burning of waste (see paragraph 104 above). The Court further notes the Government's submissions on the importance of this instrument as an effort to ascertain, in a systematic manner, the nature of the pollution phenomenon at issue.

400. As to action predating 2013, there is some evidence in the case file about activities carried out by the ARPAC to identify illegal rubbish tips as far back as the early 2000s, and testing to identify contaminants in such tips (see paragraph 16 above). However, the Government have not provided the Court with a comprehensive picture of these activities. The Court further reiterates that in 2011 the US Department of the Navy, in conducting its public-health evaluation, noted the limited availability of information from the Italian authorities to determine the nature and extent of contamination in areas where US Navy personnel resided, and that further investigation was needed by the Italian authorities to document the nature and extent of such contamination (see paragraph 32 above).

401. The Court is struck by what appears to be the absence of a systematic approach to identifying the affected areas and the pollutants released as a result of the *Terra dei Fuochi* phenomenon prior to enactment of the 2013 instrument, despite the authorities' knowledge of all the significant aspects of the problem for almost two decades (see paragraphs 10 and 14 above). In view of the foregoing, the Court is not persuaded that, at least up until 2013, the authorities took adequate steps to identify the areas affected by the pollution phenomenon and the nature and extent of the resulting contamination.

402. Turning to the measures introduced from 2013 onwards, the Court acknowledges the importance, as highlighted by the Government, of Decree-Law no. 136 as a measure enabling polluted areas to be identified and environmental elements to be tested for contaminants. As regards that instrument's concrete implementation, it appears from the material submitted by the Government that the testing activities carried out between 2014 and 2020 covered 240 hectares of land that had been classified under the highest presumed risk categories, and that this testing had been completed and that the Working Group has classified the plots of land in question under their final risk categories (see paragraph 100 above).

403. While the Court welcomes the important efforts described in the preceding paragraph, and is mindful that complex environmental assessment activities such as those at issue may entail lengthy processes, it cannot overlook the facts that, as noted above, the instrument providing for such an assessment was issued in an untimely manner, but also that eight years after its enactment, no assessment had yet been conducted for certain identified plots of land and progress was slow on others. Indeed, according to the material submitted by the Government, in 2021 there were still areas belonging to the identified risk categories for which testing was at a preliminary stage and others for which classification and testing had not even begun at all (see paragraph 101 above). Moreover, as of the same date no action seems to have been taken as regards land in the two municipalities which were included in the *Terra dei Fuochi* by the inter-ministerial Decree of 10 December 2015. In this respect, and in the absence of arguments or evidence in the case file concerning the reasons for such delays in its implementation, the Court cannot conclude that the authorities acted with the diligence required of them.

404. The Court also notes that in its 2018 report on Campania, the sixth parliamentary commission of inquiry took note of the importance of the Working Group's actions on mapping and testing. At the same time, it expressed concerns about the fact that the Working Group had been obliged, through no fault of its own, to conduct its concrete assessment of contamination and the associated risk to health and the environment without any regulations setting out the relevant parameters and

procedures for agricultural land, although the enactment of such an instrument had been provided for by law since 2006 (see paragraph 74 above). In the commission's opinion, this could have created problems in terms of underestimation of the risk in certain cases and overestimation in others (ibid.). The Court notes that Law no. 6 of 2014 provided that the regulation at issue had to be adopted within ninety days of the date of its entry into force (see paragraph 106 above), but that even so the regulation was adopted only in 2019 (see paragraph 87 above). It then took approximately one further year for the issuing of a reply to the Working Group's inquiries as to how the adoption of such a regulation would impact its work (see paragraph 101 above). Also being mindful of the concerns voiced by the parliamentary commission, the Court is once again led to call into question the diligence of the authorities.

405. The Court further observes, as also highlighted by the applicants, that Decree-Law no. 136 focuses exclusively on land used for agriculture and water used for agricultural irrigation purposes. Investigations concerning, for example, air pollution, or the identification of areas affected by pollution that are not part of agricultural land fall outside the instrument's scope. In this connection, the Court notes that in its 2018 report on Campania, the sixth parliamentary commission of inquiry recommended, amongst other things, that monitoring measures in connection with the *Terra dei Fuochi* phenomenon be directed at all sites affected by illegal waste disposal practices and not just those located within agricultural land, the pollution problem at issue being, in the commission's words, "of a wider nature" (see paragraph 74 above).

406. With regard to measures for ascertaining soil and water contamination falling outside the scope of the monitoring activities provided for by Decree-Law no. 136, and the scale of air pollution in the so-called *Terra dei Fuochi* area, the Government referred to the "Transparent Campania" integrated monitoring plan adopted in 2015 (see paragraph 55 above). Only one document was submitted concerning the implementation status of this monitoring plan. It shows that a portion of the monitoring activities envisaged by the plan had been carried out as of March 2017 (see paragraph 68 above). The Government indicated that this programme was launched in 2015, although it is not clear for how long it was in place and whether the testing and monitoring activities were ever completed. A document containing a programme of activities to be carried out in 2019-2021 by the Campania Region within the context of the "Action Plan to combat the phenomenon of the illegal dumping and incineration of waste" (see paragraph 66 above) indicates that a "follow-up" to the Transparent Campania programme was indeed envisaged, and that this included monitoring of air and water, not only in agricultural areas but also in urban settings. On the date of publication of that document in April 2019, the actions envisaged appeared to be at a preliminary stage, involving a study of existing monitoring efforts in order to plan more targeted activities at a later stage; sampling activities would be planned in order to define areas of concern (ibid.).

407. The Government also mentioned, without elaborating on their statement, that that ARPAC had carried out environmental monitoring activities, including monitoring of air quality and analyses of surface water, groundwater, and bathing water. The Court was not able to obtain a clear, comprehensive picture of these activities, or whether and in what way they relate to other monitoring efforts.

408. Based on the observations and documents submitted by the Government, the Court cannot but conclude that what has been done or was envisaged in terms of ascertaining soil, water and air

contamination – over and above the activities described in connection with the 2013 Decree, which, as mentioned above, concerned only agricultural land in the officially designated *Terra dei Fuochi* municipalities, – was somewhat fragmented.

409. Turning to the efforts to identify areas affected by illegal dumping, burying and incineration of waste outside the remit of the 2013 Decree, the Court takes note of the setting up, in 2016, of an information platform for recording the location of those sites where waste was being dumped and incinerated, in line with the "Action Plan to combat the phenomenon of the illegal dumping and incineration of waste" at regional level (see paragraph 66 above). According to the information submitted by the Government, the platform was operational by 2019. The Court also notes that the Government made a non-specific reference to the ARPAC having collected data on sites affected by illegal disposal and incineration of waste. It is not clear to the Court if and in what manner these efforts were interconnected or coordinated. As regards the establishment of registers of areas affected by the abandonment and incineration of waste under Regional Law no. 20 of December 2013 (see paragraph 42 above), and in reply to a question by the Court regarding the implementation of this provision, the Government in their observations of September 2019 listed only seven municipalities as having established such registers, while highlighting that it was the responsibility of individual municipalities to do so.

410. In view of the foregoing, the Court finds that, as regards measures taken to identify the areas affected by the pollution phenomenon at issue and to ascertain the nature and extent of contamination falling outside the scope of Decree-Law no. 136 of 2013, there is no evidence in the material submitted to the Court of a systematic, coordinated and comprehensive response on the part of the authorities.

411. Lastly, the Court notes that, according to documents submitted by the parties and dating from 2018 to 2021, the pollution phenomenon at issue does not seem to have ended, in that illegal waste disposal sites continued to be discovered, and illegal incineration continued to be reported (see paragraphs 73, 84 and 99). The Court notes that, against such a background, measures to ensure periodic updating of the situation in the affected areas are especially significant. The Court notes that the Government did not make any specific submission on this point, despite an invitation by the Court to provide information in this connection.

– *Measures to manage risks*

412. The Court notes that the Government placed considerable emphasis on the steps taken to manage risk under Decree-Law no. 136 of 2013 (see paragraph 104 above). They drew the Court's attention to the fact that plots of land investigated under this instrument had been classified into risk categories entailing different degrees of restrictions on agricultural activities, with a view to protecting health (see paragraph 116 above). The Government further cited the inter-ministerial decrees of 11 March 2014 and 12 February 2015, which formalised the classification of land carried out by the Working Group and the restrictions on performing agricultural activities. That said, it emerges from some of the documents submitted by the Government that there had been some delay in adopting certain of the legislative instruments formalising the Working Group's findings and introducing the related restrictions, thereby entailing delays in the implementation of protective measures (see paragraphs 100 and 101 above).

413. Turning to similar protective measures outside the remit of the 2013 Decree, which concerns only agricultural land, the Court notes that Regional Law no. 20 of December 2013 (see paragraph 42) above provided that registers of areas affected by abandonment and incineration of waste were to be set up and that the areas identified in such registers could not be used for agricultural, productive, building, touristic, or commercial activities pending evidence, *inter alia*, that risks to health could be excluded. While noting once again that, according to the Government, only seven municipalities had set up such registers as of 2019, the Court notes that there is no information in its possession, nor was any information submitted by the Government, as regards protective actions taken in compliance with such provisions.

414. The Court notes that the Government also placed considerable emphasis on efforts carried out with respect to the decontamination of land affected by the pollution phenomenon at issue. In this connection, they singled out the 2018 National Decontamination Programme as a key tool to carry out urgent decontamination and safety measures in what was referred to as "contaminated land" in the *Terra dei Fuochi* zone. However, the Court observes that the material submitted with respect to this instrument concerns merely the preparatory activities necessary for launching the programme (see paragraph 93 above).

415. As to decontamination efforts at the regional level, according to the progress report on the Regional Decontamination Programme, published in March 2019 by the Campania Regional Council, and relied on by the third-party interveners, for approximately 70% of the sites across the Region identified as requiring decontamination in the 2013 programme, as well as those added subsequently, no procedure had been launched (see paragraph 81 above). It emerges from the same report that at the time of its drafting decontamination activities had been concluded in only 3% of the sites (ibid). That being said, the Court notes that this report refers not only to decontamination in relation to the pollution phenomenon at issue in the present case, but to all areas requiring decontamination at regional level.

416. With specific reference to the *Terra dei Fuochi* phenomenon, the Court notes the Government's reliance on measures adopted in 2017 and 2018 to speed up the implementation of safety and decontamination measures in areas identified in the 2013 Regional Decontamination Plan and subsequent additions, a large part of which concern what the documents refer to as the *Terra dei Fuochi* area (see paragraphs 70 and 76 above). The interventions concerning municipalities listed in the officially designated *Terra dei Fuochi* municipalities, as highlighted by the Government, included rendering safe a number of illegal rubbish tips and the subsequent decontamination of the area concerned; the classification and decontamination of agricultural land identified under Law no. 6 of 2014 (see paragraph 103 above); the removal of waste from various sites, including solid urban waste from temporary storage sites, and conducting soil preliminary investigations and taking the required safety and decontamination measures. While such efforts to expedite decontamination activities are certainly to be recognised, the Court notes that several activities merely envisage a preliminary classification of the areas in question. Moreover, the document submitted by the Government identified difficulties encountered in developing the plan and warned of possible additional hurdles which might slow down the process (see paragraph 76 above). Finally, the Court observes that, as of September 2019, in terms of concrete implementation, the Government only noted the publication of public tender documents.

417. As to decontamination measures carried out at the municipal level, in their observations of September 2019 the Government mentioned that certain decontamination activities were being carried out directly by municipalities with regional funding, and that the Campania Region committed to assisting those municipalities which did not have the capacity to carry out these activities themselves. However, no further details were provided. While it emerges from the documents in the case file that some actions were envisaged in the Action Plan and its subsequent articulations (see paragraphs 66, 78 and 85), the Government did not elaborate on them. In sum, it is difficult for the Court to assess, in a sufficiently detailed manner, to what extent efforts have been planned or implemented at the local level, and if and how the actions listed by the Government are interrelated.

418. The Court observes that the sixth parliamentary commission of inquiry, in its 2018 report on Campania, pointed to the slow overall progress in the region in decontaminating sites included as "sites of national interest" and requiring urgent decontamination (see paragraph 74 above). It also referred, among other points, to generalised difficulties in the public-tender procedures necessary for selecting providers, leading to a "stalling" of urgently required decontamination activities (ibid.).

419. The Court further notes that in its December 2020 report, the Working Group established by the National Health Institute and the Northern Naples prosecution service (see paragraph 63 above) reported that no significant clean-up and remedial activities had been conducted by the time the investigation began in 2016 in the study area, which covered thirty-eight municipalities, of which thirty-seven were municipalities identified by the decrees as forming part of the *Terra dei Fuochi* area (see paragraph 98 above).

420. The Court also notes the concerns expressed by the UN Special Rapporteur on Toxics and Human Rights with regard to decontamination efforts in connection with the *Terra dei Fuochi* phenomenon, following a country visit to Italy in 2021 (see paragraph 178 above). The Special Rapporteur highlighted the insufficient funding allocated for this purpose and considered that more support was required from the central Government.

421. Overall, based on the information submitted to it, which often relates to the entire Campania Region, the Court finds it difficult to obtain a clear sense of the decontamination efforts envisaged in the municipalities affected by the *Terra dei Fuochi* phenomenon, particularly with regard to the resulting pollution, and the tangible steps taken to implement them. It highlights, in this respect, that the sixth parliamentary commission of inquiry, in its 2018 report on Campania, stated that it had encountered difficulties in obtaining a reliable reconstruction of decontamination activities in the Campania Region, albeit not only in relation to the *Terra dei Fuochi*, and that the information submitted to it by the authorities responsible for such activities was often fragmented and outdated (see paragraph 74 above). In the Court's view, the very fact that a commission of inquiry set up by the State itself found that it was unable to gather a complete picture, and could not obtain updated and sufficiently extensive data is revealing, and discloses a cause for concern in and of itself.

422. What does appear from the information submitted to the Court, in very general terms, is a slow overall progress in decontamination efforts, with many of the actions described by the Government involving only preliminary steps, as recently as in 2017 and 2019. The decontamination efforts at various levels also appear to be characterised by delays, despite statements on the urgent need for decontamination in certain areas affected by illegal waste-disposal practices. It is not clear to the

Court if and in what manner the various efforts envisaged at the municipal, regional and national level were interrelated and/or coordinated. In this latter respect, the Court refers to the concerns expressed by the sixth parliamentary commission of inquiry, in its 2018 report on Campania, about a generalised problem of coordination and attribution of responsibilities in the decontamination sphere, in particular as regards identification of the entities responsible for decontamination activities at different levels of the State apparatus (see paragraph 74 above). The same Commission had noted slow progress despite what it described as an extremely serious situation requiring rapid, efficient and effective action (ibid.).

423. Lastly, the Court was unable to gather a sense of how the areas that have not yet been decontaminated or where hurdles to decontamination existed were to be 'rendered safe'.

– *Measures to investigate health impacts*

424. According to the Government's submissions, a large number of actions have been taken to investigate the impact of the pollution phenomenon on health, with a view to protecting the individuals residing in what they refer to as the *Terra dei Fuochi* area.

425. Turning to the material furnished by the Government in support of their submissions, the Court cannot but note at the outset that the Government made an overarching reference to a note drafted by the Campania Regional Administration (see paragraph 322 above).

426. The Court observes, as it has in connection with the other categories of measures, that the majority of the actions listed relate to measures introduced after 2013. Evidence of earlier action noted by the Government include the commissioning by the National Civil Defence Department of the study carried out in conjunction with the WHO (see paragraphs 21 and 25 above). Once again, the Court cannot rule out the possibility that other investigations, which were not listed by the Government and are not included in the material submitted by the parties, may have been carried out. At the same time, it notes that the Italian Senate, through its 12th Committee, drew attention to the delays in recognising the seriousness of the *Terra dei Fuochi* phenomenon, especially with regard to the risks to health and the need to take steps for cancer detection among the relevant population groups (see paragraph 73 above). In the same report, the Italian Senate concluded that at least until 2013, and to a certain extent also at the time that its report was drafted in 2018, the authorities had not collected sufficient data about the impact of pollution linked to the *Terra dei Fuochi* phenomenon on the environment and on public health (see paragraph 73 above).

427. Turning to the measures introduced from 2013, and after an overall examination of the materials submitted by the Government, the Court notes that one of the key actions mentioned in the documents from the Campania regional health authorities is implementation of the health-related provisions introduced by Law no. 6 of 2014 (see paragraph 107 above). These provisions included the introduction of measures to define the medical testing and screening necessary to monitor the health of the population residing in the municipalities affected by illegal waste-disposal practices as identified by the relevant inter-ministerial directives. The Court also notes that the Government have submitted documentation attesting to the progress made in implementing those provisions. In particular, it appears that considerable progress has been made in the sphere of cancer screening and care pathways in Campania, with the allocation of special funding and initiatives specifically targeting the *Terra dei Fuochi* municipalities, and in implementing prevention measures in respect of diseases potentially connected to exposure to the pollution arising from illegal waste-

disposal practices in these municipalities. The Court also notes measures taken to strengthen cancer registries and epidemiological surveillance, with the result that by 2018 the entire population of the Campania Region was under epidemiological surveillance.

428. The Court also takes note of a large number of epidemiological investigations carried out under the auspices of the authorities. It notes, in particular, the studies aimed at monitoring human exposure to environmental contaminants and health risks in the Campania Region, as listed by the Government (see paragraphs 55 and 86 above). The Court notes that, with the exception of the "SPES" study, which was launched in 2015 (see paragraph 55 above) and seems to have been completed (given that a follow-up study was envisaged), no dates or other information have been provided for the other studies (see paragraph 86 above). The Government stressed the cooperation between prosecution services and the entities involved in epidemiological surveillance (see paragraph 63 and 69 above). In the latter regard, the Court notes the study investigating the possible health impacts of waste-disposal practices, both legal and illegal, in thirty-eight municipalities under the jurisdiction of the Northern Naples Prosecution Service, which was conducted by the Working Group established under an agreement between the National Health Institute and the Northern Naples Prosecution Service; the findings were published in 2020 (see paragraph 98 above). The Court further notes the "*Sentieri*" project and, in particular, the updates to the studies conducted in 2015 (see paragraph 57 above) and 2019 (see paragraph 83 above).

429. Against this background, and based on the material submitted to it, the Court is not persuaded that, at least prior to 2013, the authorities took adequate steps to investigate the health impacts relating to the pollution phenomenon at issue. The Court notes that at as far back as 1998 the second parliamentary commission of inquiry, in noting an increase in cancers in the province of Caserta, urged the authorities to investigate any links between this increase and the illegal dumping of dangerous waste on the territory in question (see paragraph 14 above). While the Court acknowledges the progress made in the intervening period, as described in the preceding paragraphs, and in no way underestimates the importance of the measures taken, it finds it striking that the first attempt at a coordinated, systematic and comprehensive approach to monitoring the health and ensuring epidemiological surveillance of the population living in the area affected by the pollution phenomenon at issue was put forward almost two decades later, with the enactment of Law no. 6 of 2014 (see paragraphs 105 and 107 above). The Court cannot but notice, in addition, that efforts to implement what are referred to by the Government as the "health-related provisions" of Law no. 6 of 2014 appear to have taken tangible form only as of 2016. Indeed, it emerges from the material submitted by the Government that no action was taken to implement these provisions until June 2016, and that, on account of this inaction, it proved necessary for a Special Commissioner to adopt a decree outlining a programme of action, in order to ensure that the provisions in question were put into effect (see paragraph 62 above).

430. In view of the foregoing, the Court is not persuaded that the authorities acted with the required diligence in their investigation of the health-related impact of the pollution phenomenon at issue.

– *Measures to combat the illegal dumping, burying and incineration of waste*

431. The Court reiterates that the pollution phenomenon at issue stemmed from the dumping, burying and incineration of waste by organised criminal groups as well as by industry, businesses and individuals who operated outside the bounds of any lawful conduct. With regard to measures

to prevent and deter such conduct, the Government focused on monitoring of the affected territory by law-enforcement bodies and on the repression of such conduct by the criminal-law system.

– *Monitoring of the territory by law-enforcement bodies*

432. As to the first category of measures highlighted by the Government, the Court's attention was drawn to the creation of the Delegated Official in November 2012, an institutional figure set up to act as a liaison between law-enforcement bodies and the different institutional actors involved in the efforts to combat illegal waste-disposal practices (see paragraph 34 above). The two reports by the Delegated Official from 2019 and 2020, submitted by the Government, disclose extensive efforts by this institutional actor to bring together these various entities and to coordinate monitoring activities (see paragraphs 84 and 99 above). The reports also reveal ample concrete efforts in terms of the territorial monitoring by the different law-enforcement entities (army, various police forces), including via joint operations overseen by the Delegated Official. What also emerges as a particularly important step is the collection by the Delegated Official of statistics, not only on the number of fires and illegal disposal sites reported or discovered, but also on the activities carried out by law-enforcement bodies. For example, the January 2021 report, submitted by the Government, lists the number of law-enforcement units deployed, the number of checks on companies, persons and vehicles, the number of seizures of companies and vehicles, and the number of administrative fines issued in the second semester of 2020 (see paragraph 99 above). That said, it must be noted that the Delegated Official pointed to hurdles encountered in carrying out his duties. In particular, the 2021 report refers, for example, to a lack of cooperation by regional authorities (ibid.). Concerns were raised also with reference to staff shortages in law-enforcement bodies (see paragraph 84 above).

433. The Court notes that the Government also placed considerable emphasis on steps to strengthen monitoring activities within the ambit of the 2016 Action Plan (see paragraph 66 above). According to the Action Plan's preamble, this was considered necessary in view of the fact that illegal waste-disposal methods were particularly widespread in areas with a less visible law-enforcement presence, which contributed to generating a sense of impunity. In addition to the deployment of law enforcement and Army personnel, the plan also envisaged aerial monitoring and the use of surveillance cameras. The Government also mentioned the 2018 revised "Action Plan" which envisaged an increase in the number of police officers and army personnel for patrolling purposes and the establishment of an enhanced monitoring network by means of surveillance cameras, drones and other devices (see paragraph 78 above).

434. While the Court certainly recognises the importance of the creation of the Delegated Official post in 2012 in order to ensure a degree of coordination among the actors involved in contrasting illegal waste-disposal practices, in particular as regards monitoring and control of the territory, and providing concrete data on actions taken to combat such conduct, it notes that this post was created when the authorities had known about the conduct giving rise to the phenomenon at issue, in all of its components, for almost a decade, if not longer. Similarly, while the Court welcomes the effort to streamline monitoring efforts under the 2016 "Action Plan", it once again questions the timeliness of this action, even more so when viewed against the subsequent need to introduce a new action plan in 2018, which included fresh measures to step up such efforts (see paragraph 78 above).

– *Criminal investigations and judicial proceedings*

435. The Court notes the Government's overarching contention to the effect that the authorities had acted rigorously, punctually and effectively to punish those responsible for environmental damage in what they refer to as the *Terra dei Fuochi* area. In support of their submissions, they relied on criminal investigations into illegal waste disposal practices in the area at issue and the ensuing criminal proceedings, while also underlining that significant legislative measures had been taken in the criminal-law sphere.

436. With regard to these legislative measures, the Court notes that, in its 1996 report, the first parliamentary commission of inquiry stressed the need for environmental offences to be included in the criminal-law framework as serious offences rather than just minor ones (see paragraph 10 above). In its 1998 report, the second parliamentary commission of inquiry highlighted the difficulties reported by the judiciary in securing punishment for environmental offences, the majority of which were minor offences see paragraph 13 above). The Court notes that, as submitted by the applicants and the third-party interveners, the first serious offense (*delitto*) of "organised activities for the trafficking of waste" was introduced in 2001 (see paragraph 131 above).

437. The Court further notes that, in 2004, the third parliamentary commission of inquiry expressed the view that the environmental protection afforded by means of the criminal-law framework was scarcely effective and had only a modest deterrent effect (see paragraph 20 above). It pointed to the absence of a unified, coordinated legal framework for environmental offences. It reiterated the fact that most offences were of a minor nature, a fact which the commission considered, in itself, to raise a number of concerns in terms of the real effectiveness of such provisions. In particular, this entailed short statutory limitation periods, precluded the use of certain investigative tools, and also limited the applicability of certain interim measures. The commission also commented that, although the introduction of the offence of "organised activities for the trafficking of waste" in 2001 had marked an important development, the investigative authorities who had been interviewed cast doubts on its effectiveness, given the difficulties encountered in proving the conduct underlying the offence.

438. The Court further acknowledges the introduction of the criminal offense of illegal incineration of waste in 2013 (see paragraph 132 above), which, in the words of the sixth parliamentary commission of inquiry, was a legislative intervention aimed at addressing one aspect of the specific nature of the phenomenon occurring in the so-called *Terra dei Fuochi* (see paragraph 74 above). While praising the intention to tackle an extremely serious problem via a specific criminal offence, the same commission of inquiry, stated in its 2018 report on the Campania Region that the criminal offence at issue had not proved in practice to be an effective tool in combatting the phenomenon of illegal incineration (see paragraph see paragraph 74 above). In a previous report, also published in 2018, the commission had described the limited application of the relevant provision when compared to the frequency of the phenomenon it was intended to counter.

439. The Court observes, as also noted by the applicants and third parties, that it was only in 2015, with the enactment of Law no. 68, that a set of specific criminal offences was introduced in order to combat trafficking and illegal dumping of waste (see paragraph 133 above). In 2018 the sixth parliamentary commission of inquiry, while welcoming the adoption of the latter provisions, considered that it would be necessary to monitor whether and to what extent the environmental offences introduced by the latter law would be capable of providing more effective tools in combatting environmental crimes (see paragraph 74 above).

440. Without embarking upon an assessment *in abstracto* of such a framework, the Court finds that, as described above, and against the background of the concerns voiced by the parliamentary commissions of inquiry, doubts emerge as to the effectiveness of the given legal framework in preventing environmental crimes, including those stemming from the conduct at issue in the present case, at least until the enactment of Law no. 68 in 2015. Moreover, until 2015, the legislative response appears to have been not only unconvincing in terms of its effectiveness, but also slow and piecemeal, with individual serious offences created over time but without any attempt to revisit, in a holistic manner, the deficiencies in the criminal-law system identified by the Italian Parliament's own commissions.

441. Turning to the Government's related submissions concerning criminal investigations and the criminal proceedings which stemmed from them, the Court notes that the case file indicates that criminal investigations into the dumping and burying of waste by organised criminal groups had been launched as far back as the 1990s (see paragraphs 10, 16, 20 and 53 above). The information in the case file does not, however, permit the Court to gain a clear or comprehensive picture of the criminal investigations conducted in relation to the dumping, burying, and incineration of waste in the *Terra dei Fuochi* area, and the outcome of these investigations. Similarly, the Government did not provide an overview of them, but instead focused on seven sets of criminal proceedings.

442. As regards two sets of proceedings described by the Government in their observations (see paragraphs 335 and 336 above), the Court notes that the only documents furnished in support are the operative parts of the related judgments. It emerges from these documents that one set of proceedings was discontinued due to the expiry of statutory limitation periods and, in the second set of proceedings, several individuals were convicted at first-instance for the offence of organised activities for the illegal trafficking of waste and certain offences were declared time-barred. However, the documents submitted do not provide any detail as to the facts that gave rise to the cases or how they were related to the *Terra dei Fuochi* phenomenon.

443. Another set of proceedings referred to by the Government ended with a judgment convicting an individual of minor offences involving the unauthorised storage of vehicles and vehicle parts (see paragraph 163 above).

444. Lastly, another case relied on by the Government, concerning the illegal dumping of hazardous waste in the Casal di Principe municipality, was ultimately transferred to another first-instance court due to a question of jurisdiction, and no information was provided about subsequent developments (see paragraphs 153-155 above).

445. The Court finds that, in the absence of further elaboration or substantiation, these proceedings can hardly be viewed as evidence of the effective prosecution of criminal offences stemming from the illegal conduct at issue in the present case and relating to the pollution phenomenon at stake, as the Government appear to be arguing.

446. The Court notes, however, that in three cases individuals were convicted of criminal offences in connection with the illegal disposal of large quantities of hazardous waste in municipalities included in the *Terra dei Fuochi* area (see paragraphs 148-152 and 156-159 above). The criminal offences at issue were the offence of disaster in two cases, and poisoning of waterways in the third. In one other case convictions were secured for the offence of "organised activities for the trafficking of waste" (see paragraph 131 above) in connection with the infiltration of organised crime in the

management and disposal of waste in a municipality included in the *Terra dei Fuochi* area (see paragraphs 160-162 above). Although these cases do provide evidence of effective prosecutions, the Court considers that the small number of proceedings relied on by the Government are not such as to satisfy the Court that – on the evidence of these prosecutions alone – the State has taken the necessary measures to protect the residents of the *Terra dei Fuochi* area.

447. The Court notes that the Government did not submit any evidence of proceedings having been brought in connection with the offence of illegal incineration of waste, or of any proceedings brought in connection with the new environmental offences introduced in 2015.

– *Measures in connection with waste cycle management*

448. The Court points out that the present case does not directly concern the so-called "waste crisis" in Campania *per se*, or the failure of the Italian authorities to ensure waste collection, treatment and disposal in the region, a matter which has been dealt with, as such, in other cases decided by the Court (see *Di Sarno*, cited above, and *Locascia and Others v. Italy*, no. 35648/10, 19 October 2023). That being said, to the extent that it appears from numerous documents in the case file that a contributing factor to the *Terra dei Fuochi* phenomenon could be identified as shortcomings in the waste collection, treatment and disposal system (see, for example, paragraphs 58, 74, 78, and 84 above), and given that the Government made submissions concerning the steps taken by the authorities to address these shortcomings as part of the measures adopted to address the pollution problem at issue, the Court will now proceed with the examination of these measures.

449. The Court notes that the Government referred to a number of reports, and in particular one drafted by the Campania regional authorities in 2018 (see paragraph 77 above) and another by the General Directorate on Waste and Pollution of the Ministry of the Environment in 2019 (see paragraph 94 above). The Government also filed a copy of the information submitted to the Committee of Ministers on 4 April 2019 in connection with the execution of the Court's *Di Sarno* judgment, (cited above; see paragraph 85 above). These documents indicate that legislation and other instruments were adopted in order to tackle the shortcomings in waste management in the region. They contain evidence of progress in several areas, such as in the separate collection of household waste, and disclose that the capacity for waste disposal and treatment in the region had been increased or was in the process of being increased.

450. The Court points out that the sixth parliamentary commission of inquiry praised certain achievements by the authorities in this sphere, while emphasising that a number of concerns remained as of February 2018 (see paragraph 74 above). The Court also notes that, in his report of January 2021, the Delegated Official pointed to the continued existence of "serious systemic concerns", namely inadequacies affecting the functioning of the waste cycle and the absence of facilities, which contributed to the persistence of illegal incineration practices (see paragraph 99 above).

451. The Court further observes that, at least as of September 2019, according to the Government, Italy was paying the daily penalty imposed by the CJEU in its 2015 judgment (see paragraph 173 above).

452. With regard to execution of the above-cited *Di Sarno* judgment, the Court notes that the Committee of Ministers' decision of June 2019, while acknowledging efforts by the Italian authorities aimed at promoting systems of separate collection and the encouraging results achieved in this

regard, also noted with concern that, at least until 15 February 2018, only a minimal part of the so-called "historical waste" accumulated prior to 2009 had been removed (see paragraph 175 above). In September 2021 the Committee of Ministers noted with concern that dysfunctions continued to be reported in relation to waste disposal in Campania (see paragraph 176 above). However, the Court also points out that, in September 2022, the Committee of Ministers noted with satisfaction the progress made towards the elimination of "historical waste" and the further progress expected in the same year, although it noted with some concern that no significant progress had been made at the level of collecting sorted waste.

453. Based on the foregoing considerations, the Court will limit itself to concluding that for many years after a state of emergency was declared in Campania in the mid-1990s in connection with the so-called "waste crisis", and at least up until 2019, the Italian authorities appear to have been rather slow to address the shortcomings affecting the Campania Region's waste collection, treatment and disposal system.

– *Measures in connection with the provision of information*

454. The Court considers at the outset that in the present case the assessment of whether the authorities complied with their obligation to provide individuals, such as the applicants, living in areas affected by the pollution phenomenon, with information enabling them to assess the risks to their lives and health overlaps to some extent with the question of whether they first took measures to identify the affected areas and to ascertain the nature and extent of the contamination. The Court has already noted the absence of a systematic approach in this respect prior to 2013, and while it has acknowledged a number of steps taken by the authorities in the intervening period (see paragraphs 398 to 407 above) it is not persuaded that the authorities' response in terms of gathering information on the nature and extent of the pollution phenomenon at issue has been sufficiently systematic, comprehensive and coordinated, in particular as regards efforts transcending the assessment of agricultural land under Decree-Law no. 136 of 2013 (see paragraphs 408 and 410 above). In the Court's view, this cannot but reflect negatively on the authorities' ability to provide individuals living in areas affected by the pollution phenomenon with the necessary available information to enable them to assess the risks to their lives and health.

455. Turning to dissemination of the information that had been gathered and was available, the Court notes that, aside from mentioning publication on the ARPAC website of the findings of the Working Group set up under the 2013 Decree (see paragraphs 111 to 116 above) the Government have not made any specific submissions about the public dissemination or release of information concerning the pollution phenomenon at issue and/or its actual or potential health impacts. That being said, the Court notes that several epidemiological studies conducted under the auspices of the State authorities (see paragraphs 21, 25, 57, 64, 83 and 98 above) were publicly available.

456. The Court considers that in assessing whether the authorities complied with their duty to provide information, it must necessarily take into account the specific nature of the pollution phenomenon at issue and the types of risk concerned. The Court has already noted the large-scale nature of the *Terra dei Fuochi* phenomenon and its wide geographical spread. It has also noted that it stemmed from various forms of unlawful – and thus completely unregulated – conduct over many years, namely the dumping and burying of hazardous and other waste, often associated with its incineration. The Court also observes that the pollutants released into the environment as a result of

the phenomenon affected all environmental elements (air, soil, water); in addition, as highlighted by the Senate's 12th Committee, the manner in which these pollutants were released into the environment varied and, in consequence, there were different ways in which the population could come into contact with them (see paragraph 73 above).

457. Against such a backdrop, while acknowledging that epidemiological studies and other information, such as the findings of the Working Group cited by the Government, were made publicly available on an individual basis, the Court does not consider such steps sufficient in the circumstances of the present case. It finds, rather, that a pollution phenomenon of such magnitude, complexity, and seriousness required, as a response on the authorities' part, a comprehensive and accessible communication strategy, in order to inform the public proactively about the potential or actual health risks, and about the action being taken to manage these risks.

458. Lastly, the Court cannot but note that, in the present case, information that had been provided to the Italian Parliament in 1997 about the systematic practices of burying and dumping of hazardous waste, practices which had been occurring since at least 1988 (see paragraph 12 above), was covered by State secrecy and was only declassified and made available to the public in 2013, that is, fifteen years later (see paragraph 40 above). While the Court does not call into question that there may be a strong public interest in maintaining the secrecy of certain information (see, for example, in the context of the fight against terrorism, *Al-Hawsawi v. Lithuania*, no. 6383/17, § 185, 16 January 2024), it is struck by the overall duration and all-encompassing nature of the official secrecy imposed in the present case.

(γ) General Conclusions

459. Without seeking to repeat the conclusions drawn in relation to the specific sets of measures analysed in the preceding paragraphs, the Court makes the following general observations with regard to the Italian authorities' response to the *Terra dei Fuochi* pollution phenomenon.

460. The Court cannot but note that the Government in their observations have relied almost exclusively on measures introduced after 2013, even though it emerges from the material submitted to the Court that some action had already been taken before that date. Indeed, the Court is struck by the fact that the first instrument of a general nature adopted with a view to ascertaining the extent of the pollution phenomenon at issue and addressing its components was enacted only in December 2013 (see paragraph 103 above), despite the authorities' knowledge of at least certain significant aspects of the problem since the early 1990s, and about the phenomenon in its entirety at least from the early 2000s (see paragraphs 16 – 18 above).

461. The Court cannot rule out the possibility that further isolated measures, which were not listed by the Government and are not included in the material submitted by the parties, may have been taken by the authorities prior to 2013. However, the Court notes that in 2018 the Italian Senate's 12th Committee stated that the authorities had "begun" to evaluate the critical extent of the situation in the area of Campania known as *Terra dei Fuochi*, about which they were well informed, and to take action, with considerable delay, and had started taking concrete steps to address the phenomenon only in 2013 (see paragraph 73 above). Given the nature of the pollution problem at issue and the type of risks concerned, the Court finds such a delay in taking action to be unacceptable. The Court is also led to conclude, based on the material available to it, that prior to 2013 the measures to address the pollution phenomenon were fragmented at best, and that no

meaningful efforts to approach the problem in a systematic, comprehensive, and coordinated manner can be detected.

462. The Court is also struck by the fact that an "Action Plan" to combat the phenomenon of illegal dumping and incineration of waste at regional level was adopted only in 2016 (see paragraph 66 above). Moreover, the Court notes that by November 2018 a new implementation strategy for the Action Plan was deemed necessary (see paragraph 78 above). While acknowledging that this new strategy represents an important attempt to approach the *Terra dei Fuochi* problem in a more structured and coordinated manner, the Court makes several observations. First, it notes that the need for a more structured and coordinated approach took form as a concrete proposal only at the end of 2018, that is, well over two decades after the problem first came to the authorities' attention (see paragraph 78 above). Moreover, the Court is concerned by the fact that the document's Preamble appears to suggest that, even in 2018, it was still considered necessary, first to identify, and, secondly, to coordinate the responsibilities of the different entities involved in combating illegal incineration practices (ibid.). The Court also notes that the 2018 strategy appears to have shifted the primary focus to one specific aspect of the phenomenon at issue in the present case, namely, illegal incineration. Lastly, based on the documents submitted to it, it is difficult for the Court to gain a sense of whether, and in what way, the measures envisaged in the Action Plan are interrelated or coordinated with the other existing efforts being carried out by other institutional actors involved in addressing the *Terra dei Fuochi* problem.

463. In addition, the Court notes that the Government have not provided sufficient information in respect of several sets of the listed measures to enable the Court to obtain a sense of how they have been implemented in practice and what progress has been made (see, for example, 417, 421, 423, 428, and 441).

464. Lastly, the Court cannot but observe that the material submitted to it indicates that the implementation of certain sets of measures was characterised by delays (see for example, paragraphs 403, 404, 412, 416, 418, 422 and 429 above).

465. In the light of the foregoing general considerations, coupled with those made in connection with certain specific sets of measures, the Court finds that the Government have not established that the Italian authorities approached the *Terra dei Fuochi* problem with the diligence warranted by the seriousness of the situation and considers that they failed to demonstrate that the Italian State did all that could have been required of it to protect the applicants' lives.

466. In light of the Court's findings at paragraphs 384 to 392 above, the Government's objection to the effect that the applicants could not be considered victims of the violation complained of on account of the absence of a proven causal link between the alleged breaches of the Convention and the harm suffered by the applicants must be dismissed.

467. It follows from the above that there has been a violation of Article 2 of the Convention.

468. The Court considers that, in the light of the foregoing, and in particular its reasoning at paragraphs 435 to 447 above, the question of whether there existed an adequate legal framework enabling the authorities to prosecute those responsible for the pollution does not warrant a separate examination.

2. *Alleged violation of Article 8*

469. Having regard to its findings under Article 2, namely that the Government have failed to demonstrate that the Italian State did all that could have been required of it to protect the applicants' lives, and considering that in respect of Article 8 the applicants relied essentially on the same arguments as those made in respect of their complaint under Article 2, the Court considers that it is not necessary to examine whether there has also been a separate violation of Article 8 on account of an alleged failure to protect the applicants' health and well-being.
470. As to the alleged breach of Article 8 on account of a failure to provide the applicants with information on health risks, having regard to the conclusions drawn under Article 2, and in particular its reasoning at paragraphs 454 to 456 above, the Court takes the view that it is not necessary to examine this complaint separately.

V. OTHER ALLEGED VIOLATIONS of the Convention

471. Relying on Article 13 of the Convention, the applicants alleged that there were no effective remedies available to challenge the alleged violations. Applicant no. 5 further complained of a breach of the procedural limb of Article 2 of the Convention.
472. However, having regard to the facts of the case, the submissions of the parties and its findings under Article 2 of the Convention, the Court considers that it has examined the main legal questions raised in the present application and that there is no need to give a separate ruling on the admissibility and merits of the remaining complaints.

VI. APPLICATION OF ARTICLE 46 OF THE CONVENTION

473. Article 46 of the Convention provides:
"1. The High Contracting Parties undertake to abide by the final judgment of the Court in any case to which they are parties.
2. The final judgment of the Court shall be transmitted to the Committee of Ministers, which shall supervise its execution.
474. The Court reiterates that a judgment in which it finds a breach of the Convention imposes on the respondent State a legal obligation not just to pay those concerned the sums awarded by way of just satisfaction, but also to choose, subject to supervision by the Committee of Ministers, general measures to be adopted in its domestic legal order to put an end to the violation found by the Court and to redress as far as possible its effects. It is primarily for the State concerned to choose, subject to supervision by the Committee of Ministers, the means to be used in its domestic legal order to discharge its obligation under Article 46 of the Convention. However, with a view to helping the respondent State to fulfil that obligation, the Court may seek to indicate the type of general measures that might be taken in order to put an end to the situation it has found to exist (see *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania* [GC], no. 47848/08, §§ 158-59, ECHR 2014; *Stanev v. Bulgaria* [GC], no. 36760/06, §§ 254-55, ECHR 2012; *Scoppola v. Italy (no. 2)* [GC], no. 10249/03, § 148, 17 September 2009; and *Broniowski v. Poland* [GC], no. 31443/96, § 194, ECHR 2004-V).

A. The parties' submissions as to the suitability of the pilot-judgment procedure

1. The Government

475. The Government considered it unnecessary for the Court to embark on a pilot-judgment procedure, given that, in their view, the facts of the case at hand had not disclosed the existence of a structural problem.

476. They pointed out that, as already outlined in their submission on the merits of the case, the Italian State had taken all appropriate measures to monitor agricultural land, prevent risks to public health, deter the illegal dumping and incineration of waste and punish those responsible, and implement urgent safety and decontamination measures within the so-called *Terra dei Fuochi* area.
477. Relying on *Lakatos v. Hungary* (no. 21786/15, §§ 88-91, 26 June 2018), the Government argued that where a defendant State had already taken measures to remedy the applicants' complaints, the Court has ruled out application of the pilot-judgment procedure.
478. Furthermore, the Government submitted that the presence of accessible and effective domestic remedies would allow potential applicants to obtain redress for any infringements similar to those complained of by the present applicants. For this reason, the Government argued that the risk of a large number of similar complaints being lodged appeared remote, thus reinforcing their contention that the pilot-judgment procedure would not be warranted.

2. *The applicants*

(a) Application no. 51567/14

479. The applicants contested the Government's arguments.
480. They submitted that the violations complained of stemmed from a widespread, structural problem which arose from the Italian State's failure to comply with its obligations, the ineffectiveness of the relevant legislative framework, and insufficient or inefficient use of resources for the prevention, management, and repression of the conduct which had given rise to the *Terra dei Fuochi* phenomenon and for the decontamination of polluted areas. As a result of these shortcomings, approximately three million individuals had suffered and continued to suffer a breach of their rights under the Convention.
481. In support of their contention that the problem was widespread, or of a large-scale nature, the applicants stated that the officially delimited *Terra dei Fuochi* area included approximately 52% of the Campania Region's population. They again referred to the 2018 report by the Senate's 12th Committee, which stated that the list of municipalities identified by legislation and decrees as forming part of the *Terra dei Fuochi* had been drawn up on the basis of presumptions, and that this was not to be taken as implying that certain areas which were not on that list were unaffected by the phenomenon of pollution (see paragraph 73 above). They also quoted the same committee, in which the *Terra dei Fuochi* phenomenon was described as an irresponsible and uncontrolled phenomenon concerning the dumping and incineration of toxic substances and all forms of waste, and as an environmental catastrophe (ibid.).
482. The applicants reiterated their arguments summarised in paragraph 312 above regarding the impact of the *Terra dei Fuochi* phenomenon on human health. They also pointed to shortcomings affecting the Italian authorities' response in terms of identification and monitoring of contaminated land, and reiterated their arguments to the effect that decontamination efforts had been insufficient, as stated in paragraph 313 above.
483. The applicants emphasised that similar complaints had been raised in a large number of other applications pending before the Court, and that other applications on the same issues were likely to be introduced in the future.

484. On the basis of the foregoing considerations, the applicants invited the Court to adopt a pilot-judgment procedure in order to indicate the measures to be taken by the Italian State with a view to eradicating the structural dysfunctions at issue.

(b) Application no. 74208/14

485. The applicants disagreed with the Government's assertion to the effect that all necessary measures had been taken to address the harmful environmental repercussions of pollution. They further contested the Government's statement suggesting that the likelihood of a large number of similar complaints being lodged with the Court was a remote one. In this connection, they noted that there were several similar cases pending before the Court.

486. They did, however, agree with the Government that a pilot procedure in the present case would not be necessary. In support of their conclusion, and referring to the cases of *Lakatos* and *Cordella*, both cited above, they pointed to the technical complexity of the measures at issue, particularly those necessary for decontamination of the areas affected by the pollution.

B. The Court's assessment

1. *General principles*

487. The Court reiterates that Article 46 of the Convention, as interpreted in the light of Article 1, imposes on the respondent States a legal obligation to apply, under the supervision of the Committee of Ministers, appropriate general and/or individual measures to secure the applicant's rights which the Court has found to be violated. Such measures must also be taken as regards other persons in the applicants' position, notably by solving the problems that have led to the Court's findings of a violation (see, among other authorities, *Rutkowski and Others v. Poland,* nos. 72287/10 and others, § 200, 7 July 2015; *Rutkowski*; *943Ališić and Others v. Bosnia and Herzegovina, Croatia, Serbia, Slovenia and the former Yugoslav Republic of Macedonia* [GC], no. 60642/08, § 78, ECHR 2014; *Torreggiani and Others v. Italy*, nos. 43517/09, 46882/09, 55400/09, 57875/09, 61535/09, 35315/10 and 37818/10, § 83, 8 January 2013; and *Broniowski v. Poland* [GC], no. 31443/96, §§ 192-93, ECHR 2004-V, and the references cited therein).

488. In order to facilitate effective implementation of its judgments, the Court may adopt a pilot-judgment procedure allowing it to identify clearly structural problems underlying breaches of the Convention and to indicate measures to be applied by the respondent States to remedy them (see Resolution Res(2004)3 on judgments revealing an underlying systemic problem, adopted by the Committee of Ministers on 12 May 2004, and *Broniowski*, cited above, §§ 189-94). This adjudicative approach is, however, pursued with due respect for the Convention institutions' respective functions: it falls to the Committee of Ministers to evaluate the implementation of individual and general measures under Article 46 § 2 of the Convention (see *Rutkowski and Others*, cited above, § 201, and the references cited therein).

489. The Court reiterates that the pilot-judgment procedure was conceived as a response to the growth in the Court's caseload, caused by a series of cases deriving from the same structural or systemic dysfunction, and to ensure the long-term effectiveness of the Convention machinery. It reiterates that the dual purpose of the pilot-judgment procedure is on the one hand, to reduce the threat to the effective functioning of the Convention system and, on the other, to facilitate the speediest and most effective resolution of a dysfunction affecting the protection of the Convention

rights in question in the national legal order (see *Burmych and Others v. Ukraine* (striking out) [GC], nos. 46852/13 et al., § 158 and 159, 12 October 2017).

2. *Application of the above principles to the present case*

(a) Whether the situation in the present case warrants the application of the pilot-judgment procedure

490. The Court notes at the outset that the violation found in the present case originated in a widespread, large-scale pollution phenomenon stemming not from an isolated incident, but from the illegal dumping, burying and/or uncontrolled abandonment of hazardous, special and urban waste, often associated with its incineration, carried out over decades, in a manner often described as "systematic" (see paragraphs 16, 68, 73, and 148 above). The Court also emphasises its findings as to the slow response of the State authorities in reacting to the problem (see paragraphs 460, 461 and 462 above) as well as the delays that continued to characterise efforts to address it (see paragraph 464 above). This denotes, in the Court's view, a systemic failure to respond adequately, both in terms of time and effort, to the pollution problem under scrutiny. Moreover, the Court notes that the state of affairs complained of cannot be considered as having ceased, at least in so far as evidenced by the most recent documents submitted by the parties, which are dated between 2018 and 2021 and disclose that illegal waste disposal sites continued to be discovered and illegal incineration of waste was still being reported (see, for example, paragraphs 73, 83, 84 and 99 above).

491. In addition, the Court cannot overlook the fact that according to its case management database, seventy-two applications have been brought raising similar issues, of which thirty-six applications, with a total of approximately four thousand seven hundred applicants, are currently pending before it in respect of Italy. It cannot but note that the *Terra dei Fuochi* zone, as defined by the inter-ministerial directives, has a population of about 2,963,000 inhabitants (see paragraphs 7 and 8 above). As underlined by the applicants, this amounts to approximately half of the population of the Campania region.

492. Taking into account the persistent nature of the problem and the systemic shortcomings that have characterised the State's response to it, coupled with the large number of people it has affected and is capable of affecting, as well as the urgent need to grant them speedy and appropriate redress, the Court considers it appropriate to apply the pilot-judgment procedure in the present case (see *Burdov (no. 2)*, cited above, § 130, and *Finger v. Bulgaria*, no. 37346/05, § 128, 10 May 2011).

(b) General measures

493. Given that the Court's judgments are essentially declaratory, the respondent State remains free, subject to the supervision of the Committee of Ministers, to choose the means by which it will discharge its obligation under Article 46 of the Convention, provided that they are compatible with the conclusions reached in the Court's judgment. However, with a view to assisting the respondent State to fulfil its obligations, the Court may exceptionally indicate the type of measures that might be taken in order to put an end to a problem it has identified (see *Varga and Others*, cited above, §§ 101-102, and *Sukachov v. Ukraine*, no. 14057/17, § 144, 30 January 2020). In this respect, the Court finds it appropriate to give more detailed indications as to general measures to be taken in respect of the systemic problem identified above (see paragraph 490 above).

(i) Comprehensive strategy drawing together existing or envisaged measures

494. The Court reiterates at the outset its finding to the effect that the nature of the threat at issue in the present case has, in its view, required throughout a systematic, coordinated, and comprehensive response on the part of the authorities (see paragraph 396 above). While the Court acknowledges that significant efforts have been made – albeit belatedly – to address the *Terra dei Fuochi* problem in a more structured manner (see, in particular, paragraph 462 above), it urges the State authorities to take further steps to ensure comprehensiveness and coordination in their approach, with a clear delimitation of competencies so as to avoid unnecessary fragmentation of responsibility among the different levels of the State apparatus (local, regional, and central government) and the different State agencies and institutional actors involved in tackling the problem.

495. Against this background, the State authorities must build on their existing efforts, with a view to developing, in proper consultation with relevant local, regional, and/or national stakeholders (including representatives of civil society and relevant associations), a comprehensive strategy bringing together all existing or envisaged measures, at every level of the State apparatus, in order to address the pollution phenomenon at issue. This includes all measures aimed at identifying the areas affected by illegal waste disposal practices and assessing the nature and extent of their contamination (soil, water and air); managing any risk revealed; investigating the health impacts of the pollution phenomenon at issue; and combating the conduct giving rise to the pollution phenomenon, that is the illegal dumping, burying and incineration of waste (see paragraph 395 above). Any such strategy should contain clear time-frames for implementation in the short, medium and long term and the identification, in principle, of the resources required and their allocation to the relevant State actors.

496. With particular regard to identification of the areas affected by the pollution at issue and ascertaining the nature and extent of the given environmental contamination, the Court recalls that it has found above that such steps constitute a necessary prerequisite both for any meaningful assessment of potential or actual health risks and for defining the measures required to manage such risks (see paragraph 398 above). It notes the substantial efforts taken by the authorities in this sphere since 2013, especially with regard to the identification, testing and classification measures concerning agricultural land introduced under Decree-Law no. 136 in December 2013, converted into Law no. 6 of 2014 (see paragraph 104), and the State authorities should complete their implementation without delay. The State must also ensure, within their strategy, that measures concerning the assessment of affected sites beyond those located within agricultural land are carried out in a comprehensive and coordinated manner.

497. The Court also notes that the pollution phenomenon at issue was described by the sixth parliamentary commission of inquiry as being "in evolution", as information emerged from the testing efforts, or as investigations unearthed new waste burial or dumping sites, and given that reports of blazes, although reduced over the years, were still being registered (see paragraph 74 above). The State authorities must therefore provide, in the context of their strategy, for the continuous updating of the areas affected by illegal waste disposal practices at issue in the present case, and for their assessment in terms of the nature and extent of contamination.

498. The Court further considers that decontamination of areas affected by the environmental pollution at issue is of prime and urgent importance (see, *mutatis mutandis*, *Cordella*, cited above, § 182), as is the rendering safe of contaminated areas. The Court refers to the findings of the sixth

parliamentary commission of inquiry to the effect that its members had been unable to gain an objective, updated reconstruction of the situation of decontamination due to fragmented and incomplete data, submitted by different entities with overlapping competences, whose sphere of action was at times not entirely clear to the commission (see paragraph 74 above). In view of the foregoing, the Court urges the State authorities to make provision, in the context of their strategy, for regular and detailed reporting on the decontamination measures undertaken and/or completed and their effectiveness, with a view to better targeting future measures.

(ii) Independent monitoring mechanism

499. The Court also reiterates its findings relating to the failure to respond promptly to a problem that had been known to the authorities for many years (see paragraphs 460-461 above), the delays characterising the implementation of certain sets of measures (see paragraph 464 above), and the absence of information about the tangible implementation of others (see paragraph 463 above). Against this background, and having regard to the principle of subsidiarity, the State authorities should establish a mechanism at the domestic level for monitoring the implementation and impact of the measures introduced under any comprehensive strategy on the *Terra dei Fuochi* problem and for assessing compliance with the time-frames set out therein (see paragraphs 494-498 above). The authorities must ensure that adequate safeguards are put in place so as to guarantee the independence of the mechanism, including measures to ensure that its composition includes individuals – such as representatives of civil society and relevant associations – who are free of any institutional affiliation with the State authorities. With a view to increasing transparency, the mechanism should make its findings publicly available (see paragraph 500 below).

(iii) Information platform

500. Lastly, the Court stresses its conclusion to the effect that the authorities had not adequately discharged their obligation to provide individuals living in areas affected by the pollution phenomenon with information enabling them to assess the risks to their health and lives (see paragraphs 454-457 above). In this regard, it pointed to the absence of a comprehensive and accessible communication strategy aimed at informing the public of potential or actual health risks, and of actions taken or envisaged to manage such risks. In this respect, the Italian State should establish a single, public information platform drawing together, in an accessible and structured manner, all relevant information concerning the *Terra dei Fuochi* problem and the measures taken or envisaged to address it, with information on their implementation status (see paragraph 499 above), and that they make arrangements for its regular updating.

(c) Time-limit

501. The Court has decided to apply the pilot-judgment procedure in the present case, referring in particular to the systemic shortcomings that have characterised the State's response to the problem at issue, as set out in the present judgment, the large number of people affected and the urgent need to grant them speedy and appropriate redress at domestic level (see paragraph 492 above). Based on the foregoing considerations, the Court takes the view that the purpose of the present judgment can only be achieved if the measures are implemented without undue delay that is, no later than two years from the date on which this judgment becomes final, subject to the supervision of the Committee of Ministers.

(d) Procedure to be followed in similar cases

502. The Court has recognised as inherent in the pilot-judgment procedure that the Court examines the issues involved also from the perspective of the interests of other potentially affected persons. That assessment necessarily encompasses the procedure for similar cases – both those currently pending and those liable to be lodged with the Court in the future (and *Wałęsa v. Poland*, no. 50849/21, § 333, 23 November 2023). Since the *Broniowski* judgment it has been the Court's consistent practice to include in pilot judgments, in addition to rulings in the pilot case, various procedural decisions concerning the future treatment of follow-up cases – those communicated to the respondent Government and new ones alike. For instance, the Court has often decided to adjourn similar cases pending the implementation of general measures by the respondent State (see *Wałęsa*, cited above, § 334, with further references). However, adjournment is optional rather than mandatory, as shown by the words "as appropriate" in Rule 61 § 6 of the Rules of Court and the variety of approaches in previous pilot cases (see *Ananyev and Others*, cited above, § 235, with further references).

503. The Court decides that pending the adoption by the domestic authorities, subject to supervision by the Committee of Ministers, of the necessary measures at national level, it will adjourn the examination of any applications of which the Government have not yet been given notice, for a period of two years from the date on which this judgment becomes final. It points out that it may nevertheless decide at any moment to declare any such case inadmissible or to strike it out in the event of a friendly settlement between the parties or the resolution of the matter by other means, in accordance with Articles 37 or 39 of the Convention (see *Torreggiani and Others*, cited above, § 101, and *Rezmiveș and Others v. Romania*, nos. 61467/12 and 3 others, § 128, 25 April 2017).

VII. APPLICATION OF ARTICLE 41 OF THE CONVENTION

504. Article 41 of the Convention provides:

"If the Court finds that there has been a violation of the Convention or the Protocols thereto, and if the internal law of the High Contracting Party concerned allows only partial reparation to be made, the Court shall, if necessary, afford just satisfaction to the injured party."

A. Non-pecuniary damage

505. The applicants made the following claims in respect of non-pecuniary damage:

a) applicants nos. 5 (Mario Cannavacciuolo), 7 (Maria José Ardizzone), 10 (Luciano Centonze), and 12 (Dario Letizia) claimed 100,000 euros (EUR) each;

b) applicant no. 21 (Rosa Auriemma) claimed EUR 30,000;

c) applicant no. 24 (Giuseppina Campolattano) claimed EUR 35,000;

d) applicant no. 25 (Maria Lucia Capaldo) claimed EUR 45,000.

506. The Government considered their claims to be excessive.

507. The Court considers that the question of the application of Article 41 of the Convention is not ready for decision. It must accordingly be reserved and the further procedure fixed after the expiry of the time-limit identified in paragraph 501.

508. In the future assessment of any question under Article 41, the Court's approach may well depend on the Committee of Ministers' assessment of the authorities' response to the deficiencies identified and the remedial measures recommended under Article 46 in the present judgment (see paragraphs 494-499 above).

B. Costs and expenses

509. The applicants claimed the following sums for the costs and expenses incurred before the Court:

a) the applicants in application no. 51567/14 (applicants nos. 5, 7, 10, and 12) claimed EUR 20,000 jointly;

b) the applicants in application no. 74208/14 (applicants nos. 21, 24, and 25) claimed EUR 23,520.70 jointly;

510. They requested the Court that any award for costs and expenses be paid directly into the bank account of their legal representatives.

511. The Government contested these amounts.

512. According to the Court's case-law, an applicant is entitled to the reimbursement of costs and expenses only in so far as it has been shown that these were actually and necessarily incurred and are reasonable as to quantum. In the present case, regard being had to the documents in its possession and the above criteria, the Court considers it reasonable to award the applicants in application no. 51567/14 the sum of EUR 20,000, jointly, and the applicants in application no. 74208/14 the sum of EUR 20,000, jointly, for the proceedings before the Court, plus any tax that may be chargeable to them. These amounts are to be paid directly into the bank accounts of the applicants' representatives (see *Khlaifia and Others v. Italy* [GC], no. 16483/12, § 288, 15 December 2016).

FOR THESE REASONS, THE COURT,

1. *Decides*, unanimously, to join the applications;
2. *Decides*, unanimously, to strike application no. 39742/14, lodged by applicants nos. 1-4, out of its list of cases;
3. *Dismisses*, unanimously, the Government's preliminary objection to the effect that the Court was barred from examining the applications in that they were substantially the same as a matter submitted to another procedure of international investigation or settlement;
4. *Upholds*, by six votes to one, the Government's objection as regards the victim status/*locus standi* of the applicant associations (applicants nos. 15, 16, 17, 18, and 19) under Articles 2 and 8 of the Convention, and *declares* their complaints inadmissible;
5. *Joins*, unanimously, to the merits the Government's objection with regard to the victim status of the individual applicants under Articles 2 and 8 of the Convention, and *dismisses* it;
6. *Upholds*, unanimously, the Government's objection as regards the victim status under Articles 2 and 8 of applicants who have not resided, or whose deceased relatives have not resided, in the municipalities listed in the relevant inter-ministerial directives (applicants nos. 9, 14, 26, 27, 28, 30, 31, 32, and 33) and *declares* their complaints inadmissible;
7. *Dismisses*, unanimously, the Government's objection as to the non-exhaustion of domestic remedies;
8. *Dismisses*, unanimously, the Government's objection concerning compliance with the six-month time-limit in so far as applicants nos. 5, 7, 10, 12, 21, 24, and 25 are concerned;

9. *Upholds*, unanimously, the Government's objection concerning compliance with the six-month time-limit in so far as applicants nos. 6, 8, 11, 13, 20, 22, 23, 29 and 34 are concerned, and *declares* their complaints inadmissible;
10. *Declares*, unanimously, the complaints brought by applicants nos. 5, 7, 10, 12, 21, 24, and 25 under Articles 2 and 8 of the Convention admissible;
11. *Holds*, unanimously, that there has been a violation of Article 2 of the Convention;
12. *Holds*, by six votes to one, that there is no need to examine separately the applicants' complaints under Article 8 of the Convention;
13. *Holds*, by six votes to one, that that there is no need to examine the admissibility and merits of the applicants' complaint under Article 13 of the Convention;
14. *Holds*, by six votes to one, that that there is no need to examine the admissibility and merits of the complaint lodged by applicant no. 5 under the procedural limb of Article 2 of the Convention;
15. *Holds*, unanimously, that the respondent State must introduce, without delay and, subject to the supervision of the Committee of Ministers, no later than two years from the date on which this judgment becomes final, general measures capable of addressing, in an adequate manner, the pollution phenomenon at issue, in line with the recommendations set forth in paragraphs 494-500 of the present judgment;
16. *Decides*, unanimously, to adjourn, pending the adoption of the necessary measures at national level, all similar applications against Italy of which the Government have not yet been given notice for two years from the date on which this judgment becomes final;
17. *Holds*, unanimously, that the question of the application of Article 41 of the Convention in respect of non-pecuniary damage is not ready for decision; accordingly,

(a) *reserves* the said question in whole;

(b) *reserves* the further procedure and *delegates* to the President of the Chamber the power to fix the same, if need be, in no less than two years from the date on which this judgment becomes final;

18. *Holds*, unanimously,

(a) that the respondent State is to pay, within three months from the date on which the judgment becomes final in accordance with Article 44 § 2 of the Convention, the following amounts:

(i) EUR 20,000 (twenty thousand euros), jointly, to applicants nos. 5, 7, 10, and 12, plus any tax that may be chargeable to them, in respect of costs and expenses, to be paid directly into the bank accounts of their representatives and

(ii) EUR 20,000 (twenty thousand euros), jointly, to applicants nos. 21, 24, and 25, plus any tax that may be chargeable to them, in respect of costs and expenses, to be paid directly into the bank accounts of their representatives;

(b) that from the expiry of the above-mentioned three months until settlement simple interest shall be payable on the above amounts at a rate equal to the marginal lending rate of the European Central Bank during the default period plus three percentage points;

19. *Dismisses*, by six votes to one, the remainder of the applicants' claim for costs and expenses.

Done in English, and notified in writing on 30 January 2025, pursuant to Rule 77 §§ 2 and 3 of the Rules of Court.

Ilse Freiwirth Registrar

Ivana Jelić President

In accordance with Article 45 § 2 of the Convention and Rule 74 § 2 of the Rules of Court, the following separate opinions are annexed to this judgment:

(a) Concurring opinion of Judge Krenc;

(b) Partly concurring, partly dissenting opinion of Judge Serghides.

CONCURRING OPINION OF JUDGE KRENC

(Translation)

1. I have concurred with all of the operative provisions of the present judgment, which is of utmost importance in that it finds a violation of Article 2 of the Convention and indicates a number of measures to be taken by the respondent State in response to the serious problem of pollution identified therein by the Court.

I should like, however, to set out separately my concerns with regard to a single point, regarding the Court's approach to the *locus standi* of associations in environmental cases.

2. In the present case, in refusing to recognise the applicant associations as having standing before it (point 4 of the operative provisions), the Court relies on its traditional case-law to the effect that an association can only have standing before the Court if it is able to show that it was directly affected by the measure complained of, in other words, that it was itself impacted by them (see paragraphs 215-22 of the present judgment; see also *Fédération nationale des associations et syndicats de sportifs (FNASS) and Others v. France*, nos. 48151/11 and 77769/13, §§ 93-95, 18 January 2018, and *Čonka and Ligue des droits de l'homme v. Belgium* (dec.), no. 51564/99, 13 March 2001).

3. In Verein *KlimaSeniorinnen Schweiz*, the Court eased this case-law significantly, by recognising the possibility for associations, subject to certain conditions, to have standing to bring a case before it on account of the actions or inaction of the States relating to climate change (see *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* [GC], no. 53600/20, §§ 489-503 and 525-26, 9 April 2024).

4. The present judgment confirms, however, that this easing of the case-law is limited to the very specific context of climate change and cannot be extended to other forms of environmental harm. Paragraphs 220 and 221 of the present judgment are unambiguous on this point.

5. To many, this position is understandable. Although climate change is a global phenomenon which concerns all of humankind and will inevitably affect future generations, it is argued that environmental damage is, in contrast, traceable, and its victims are identifiable in the here and now.

6. Nonetheless, I must confess to a certain bewilderment.

Although climate change undoubtedly raises specific and unprecedented questions, is it not artificial to draw such a clear-cut distinction between climate-related issues, on the one hand, and the environment, on the other?

In both cases, it is the right to a healthy environment that is at stake. In my humble view, all forms of environmental harm, whether they are local, transnational or global, deserve equal attention as to their impact on the effective enjoyment of the rights set out in the Convention for the persons concerned. We should not lose sight of the fact that what is in issue in the present case is Article 2 of

the Convention, which enshrines the right to life, respect for which determines enjoyment of the other rights of the Convention.

In addition, environmental harm resulting from wide-scale pollution has diffuse effects, and one can hardly claim that it is perfectly circumscribed within a given perimeter and might not appear in future. How can the boundaries of environmental harm be traced with certainty? How can the persons who will be affected by this harm be determined with precision? How is it possible to be so sure that this harm will have no impact on future generations, particularly in terms of health? Is it ludicrous to argue that the burden of depollution will also overstretch future generations, given not only its scale, but also the costs involved?

In other words, and to put it plainly, are climate and environment so distinct and hermetical as to justify two fundamentally different approaches as regards the *locus standi* of associations?

7. I would recall that in the Reykjavík Declaration (2023), the Heads of State and Government solemnly emphasised the "urgency" of taking action to counter not only climate change, but also pollution and loss of biodiversity. All three issues form part of the "triple global crisis" that humanity is facing. They also affirmed that a clean, healthy and sustainable environment is essential for the full enjoyment of human rights by present and future generations.

8. I am not unaware of the source of this discrepancy. It arises from the Verein *KlimaSeniorinnen Schweiz* judgment itself. In it, the Court relaxed considerably its approach to associations' locus standi (see *Verein KlimaSeniorinnen Schweiz*, §§ 489-503) and tightened significantly the conditions relating to the victim status of individual applicants (ibid., §§ 478-88). More precisely, the Court relaxed considerably its approach to associations' locus standi because it tightened significantly the conditions relating to the victim status of individual applicants[4]. There is no doubt that had the Court not opened its doors to associations, this might have resulted in an extremely harmful gap in terms of judicial protection in the climate field.

9. The present case is different, in that the persons concerned by the impugned pollution were able to turn to the Court and be granted victim status by it. It is also noteworthy that this status is granted under Article 2 of the Convention to persons who live in the municipalities concerned by the pollution, with no requirement that they demonstrate, individually, that they were themselves affected by a life-threatening disease directly linked to their exposure to the pollution at issue (see paragraphs 390-392 of the present judgment).

Thus, there can be little dispute that the solution adopted in the present judgment is consistent with the Court's settled case-law, which grants associations *locus standi* only in "exceptional circumstances" (see *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania* [GC], no. 47848/08, §§ 104-14, ECHR 2014, and *Association Innocence en Danger and Association Enfance et Partage v. France*, nos. 15343/15 and 16806/15, §§ 119-32, 4 June 2020), either because the direct victims have died without heirs, or because their extreme vulnerability prevents them from taking action. However, such circumstances have not been shown in the present case. This is why I was able to vote with my esteemed colleagues, in line with the current case-law.

10. Nonetheless, the Court's approach seems questionable at a time when the domestic legislation of the States Parties is increasingly inclined to grant associations the right to take judicial action in environmental matters.

Thus, and concretely, it follows from the current case-law that if an association was established for the specific purpose of defending its members, who have been affected by the consequences of environment harm, it will be refused standing to act before the Court, in that it cannot itself claim to be a victim of a violation of the Convention, and this even if it has represented its members throughout the domestic proceedings. It is solely for the natural persons affected by the environmental damage to apply to the Court individually (see *Yusufeli İlçesini Güzelleştirme Yaşatma Kültür Varlıklarını Koruma Derneği v. Turkey* (dec.), no. 37857/14, § 42, 7 December 2021), an approach which the present judgment confirms unequivocally (see paragraph 219)[5].

One exception concerns cases where the association complains that the domestic judicial proceedings to which it was a party were unfair. In that situation, it is uncontested that the association can claim to be a direct victim of a violation of Article 6 (see *Collectif national d'information et d'opposition à l'usine Melox – Collectif stop Melox and Mox v. France* (dec.), no. 75218/01, 28 March 2006)[6].

11. In my opinion, there are solid arguments in favour of granting standing before the Court to associations which have been permitted to represent their members before the domestic courts on environmental issues.

There are, first, obvious reasons related to the effectiveness of the legal action, concentration of human and logistical resources and the pooling of costs. An association is an ideal channel for bringing a large number of claims by victims of environmental harm. In the present case the Court expressly acknowledges the "key role" played by the applicant associations (see paragraph 218).

There are, secondly, considerations related to the proper administration of justice. When faced with a large-scale environmental disaster, affecting potentially hundreds of thousands of people[7], is it really reasonable to require an application to the Court by each of the individuals concerned, whose interests have been validly defended by an association at domestic level? Has the Court not already taken a global approach in the present case, by refraining from examining each individual's situation with regard to the impugned exposure[8]?

Thirdly, does subsidiarity, which is at the heart of the Convention, not prevent the Court from calling into question the *locus standi* granted to an association by the national authorities, given that, according to those same authorities, it is this association's action that is best suited to ensuring effective protection of the Convention at national level, with a view to preventing, ending or providing redress for a violation? Indeed, the Court has already attached "considerable importance" to the granting of *locus standi* to an association at domestic level when deciding to recognise its standing to bring proceedings (see *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania,* § 110; see also *Association Innocence en Danger and Association Enfance et Partage v. France*, § 122).

Clearly, there can be no question of opening up unconditional access to the Court to associations. An *actio popularis* must of course remain prohibited. In reality, we are very far from this latter scenario when individuals decide to group together and have recourse to collective action in order to voice their environmental claims more effectively, faced with State or private actors which have particularly large resources at their disposal[9].

In fact, this is a matter of access to environmental justice, in order to ensure that Convention rights are indeed "practical and effective" for all of those affected.

12. It should be noted in this regard that recognition of standing is not to be confused with the granting of victim status (see Verein *KlimaSeniorinnen Schweiz*, § 464). In Verein *KlimaSeniorinnen Schweiz*, the Cour recognised the applicant association as having locus standi under Article 8 of the Convention (see Verein KlimaSeniorinnen Schweiz, §§ 525 and 526; point 4 of the operative provisions), while it held that it could be considered to have "victim status" under Article 6 of the Convention (see Verein *KlimaSeniorinnen Schweiz*, § 623; point 9 of the operative provisions).
13. In the present case, although "the Court recognises the vital function of associations as public watchdogs", it applies its settled case-law to the effect that "where an applicant association relies exclusively on the individual rights of its members, and without showing it has itself been substantially affected in any way, it cannot be granted victim status under a substantive provision of the Convention" (see paragraph 218). Moreover, emphasising that the present case "is plainly not concerned with the issue of climate change", it refuses to recognise the applicant associations as having standing to act on behalf of their members (see paragraph 221). In so doing, the Court clearly intends to limit the reach of the *Verein KlimaSeniorinnen* Schweiz judgment.
With due respect, it is difficult to understand how an association can be considered the ideal body for taking judicial action in climate matters, but that this same finding does not apply in environmental matters, even where large-scale pollution affecting a wide area and large numbers of people is in issue.
It might legitimately be wondered whether the Court's approach is "at variance with the realities of today's civil society, where associations play an important role, *inter alia* by defending specific causes before the domestic authorities or courts, particularly in the environmental-protection sphere" (see *Stop Melox* (dec.), cited above).
14. In my opinion, environmental protection must be considered as a whole, regardless of the local, transnational or global nature of the threats posed. What matters is the impact of these violations on the human rights of the individuals concerned.
It is equally clear that the effectiveness of the right to a healthy environment (for which the Convention's protection is indirect but indisputable) depends on the possibility of relying on that right in legal proceedings when faced with the authorities' failure to act.
15. I am of the view that the pragmatism which dominates the current case-law concerning access by associations to the Court has its limits. The Court has already allowed itself to depart on several occasions from the case-law which states that, in order to have standing before the Court, an association must itself have been affected by the measure about which it complains. Various and significant moves to this effect have been made in recent years. It is now important to lay down clear and consistent guidelines, specifying the exceptions in general and abstract terms, rather than continuing to authorise exemptions, here and there, on a case-by-case basis, on the grounds of "exceptional circumstances" (*Centre for Legal Resources on behalf of Valentin Câmpeanu*, § 112) or "special considerations" (*Verein KlimaSeniorinnen Schweiz*, § 475).

PARTLY CONCURRING, PARTLY DISSENTING OPINION OF JUDGE SERGHIDES

1. The present case, which is a very sensitive and unfortunate case, concerns the alleged failure of the Italian authorities to take appropriate and sufficient measures to protect the applicants' lives,

health and their right to respect for their private life in areas of the Campania Region affected by a large-scale pollution phenomenon stemming from illegal dumping, burying and/or uncontrolled abandonment of hazardous, special and urban waste, often associated with its incineration. This does not constitute a simple problem, but a life-threatening phenomenon.

2. I voted in favour of all points of the operative provisions of the judgment except for points 4, 12-14 and 19. In particular:

(a) I disagreed with the decision to uphold the Government's objection as regards the lack of victim status/*locus standi* of the applicant associations (applicants nos. 15, 16, 17, 18 and 19) under Articles 2 and 8 of the Convention and to declare their complaints inadmissible. The judgment in the present case (see paragraphs 220-222) distinguishes itself from *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* ([GC], no. 53600/20, §§ 498-499, 9 April 2024) and concludes that, since it does not concern climate change as in that case, but rather environmental pollution, there were no specific considerations weighing in favour of recognising the possibility for the associations to have standing before the Court. In my humble submission this conclusion is erroneous for four reasons. Firstly, such a distinction is very technical and not substantive; secondly, *Verein KlimaSeniorinnen Schweiz and Others* was confined to its own facts without excluding the existence of specific considerations in other cases, like the present one, which warrants the application of the pilot-judgment procedure (see paragraphs 490-92 of the judgment); thirdly, there were specific circumstances in the present case requiring the granting of legal standing to the applicant associations; and, lastly, the term "victim" in Article 34 of the Convention should be interpreted and applied autonomously, broadly and in an evolutive manner according to the principle of effectiveness (see *Gorraiz Lizarraga and Others v. Spain*, no. 62543/00, §§ 35 and 38, 27 April 2004), so as to include the applicant associations in the present case.

Several factors or considerations may support the submitted argument that the present case has "special features" that warrant the transposition of the *locus standi* test for NGOs developed in *Verein KlimaSeniorinnen Schweiz and Others*, and that distinguish the present case from *Yusufeli Ilçesini Güzelleştirme Yaşatma Kültür Varliklarini Koruma Derneği v. Turkey* (dec.), no. 37857/14, 7 December 2021, which, arguably, concerned a localised small-scale source of chemical pollution. Firstly, as seen from the facts of the case, the waste pollution in Campania is large-scale and spread across a very densely populated agricultural region; the ensuing toxic substances have been found in the soil, the water and the air. The effects of this pollution are diffuse and long-term, given that pollutants from mismanaged municipal waste are known to bioaccumulate in the food chain and breast milk, potentially resulting in multigenerational consequences[10]. Secondly, as stated in various reports issued, among others, by the United Nations Environment Programme and the World Health Organisation, uncontrolled waste knows no borders, as it is carried by waterways across and between countries[11]. Waste disposed of on land can cause long-term pollution of freshwater sources by pathogens, heavy metals, endocrine-disrupting chemicals and other hazardous compounds[12]. Open burning of waste releases Unintentional Persistent Organic Pollutants, the so-called "forever chemicals", that can be carried long distances in the air, persist in the environment, biomagnify and bioaccumulate in ecosystems[13]. Emissions from the burning and open dumping of waste are deposited in terrestrial and aquatic ecosystems and in the atmosphere[14]. Pollution from waste is associated with a range of adverse health and environmental effects, many of which

will last for generations[15]. It has been estimated that between 400,000 and 1 million people die every year as a result of diseases related to mismanaged waste that include diarrhoea, malaria, heart disease and cancer[16]. Thirdly, "[h]azardous or unsafe waste management practices, such as open burning, can directly harm waste-workers or residents of neighbouring communities [and] [v]ulnerable groups, including women and children and marginalized communities, are at increased risk of adverse health outcomes"[17]. Fourthly, waste is intrinsically linked to the triple planetary crisis of climate change, pollution and biodiversity loss[18]. In particular, "poorly managed waste generates a wide range of emissions that contribute to climate change, most significantly methane from landfills and dumpsites, and black carbon and a range of other emissions from the widespread practice of the open burning of waste"[19]. Fifthly, the remediation (clean-up) of the sites contaminated with accumulated legacy waste, and the restoration of such sites (returning the affected areas to their initial ecological state) will necessarily involve complex, long-term and costly technical measures, requiring significant expenditure from the public funds[20]. Improving waste management may also require the involvement of the private sector and a change in societal consumption habits[21].

In the light of all these considerations, it is fair to conclude that the situation in the present case, not unlike that in the case of *Verein KlimaSeniorinnen Schweiz and Others*, raises an issue of intergenerational burden-sharing and impacts most heavily on various vulnerable groups in society, who need special care and protection from the authorities[22]. Moreover, emissions from uncontrolled waste disposal, similarly to those of green-house gas emissions, produce harmful consequences as a result of a complex chain of effects, and have no regard for national borders[23]. Likewise, waste pollution and its management affect and will continue to affect whole populations, albeit in varying ways, to varying degrees and with varying severity and imminence of consequences[24]. Although mitigation measures can generally be localised and limited to specific sites from which harmful effects emanate, the already large and still growing scale of the waste problem makes mitigation necessarily a matter of comprehensive regulatory policies and cooperation between various public entities, the private sector and society. In this sense, waste pollution, like climate change, is a polycentric issue that requires a comprehensive and profound transformation in various sectors of the economy, as well as "complex and wide-ranging set of coordinated actions, policies and investments involving both the public and the private sectors"[25]. Given that the effective combating of the waste problem will require significant reduction of waste production, individuals themselves will be called upon to assume a share of responsibilities and burdens as well. Therefore, policies to combat waste pollution inevitably involve issues of social accommodation and intergenerational burden-sharing, both in regard to different generations of those currently living and in regard to future generations[26].

The present opinion can be considered a good example of a demonstration that science plays an important role in addressing legal issues, particularly in the areas of human rights and environmental law. Examining how the presence of cognitively authoritative scientific knowledge impacts the modalities of crafting convincing and (epistemically) legitimate judgments, Sulyok concludes, *inter alia*, that:

"If judges were to neglect important differences between modalities of crafting epistemically legitimate justifications for accepting or refuting science-based knowledge claims, their decisions

would become inaccurate and vulnerable to legitimacy challenges. Nevertheless, should judges respect the conditions for epistemic legitimacy, they become able to harness the cognitive authority of science to buttress the convincing force of their findings."[27]

(b) I disagree with paragraphs 469-472 and the corresponding points 12-14 of its operative provisions, namely, that there is no need to examine separately the applicants' complaints under Articles 8 and 13 of the Convention and the complaint lodged by applicant no 5 under the procedural limb of Article 2. Since I recently took the same position in my partly dissenting opinion in *Adamčo v Slovakia (no. 2)* (nos. 55792/20 and 2 others, 12 December 2024 (not yet final)), where I thoroughly presented all arguments relevant to the issue at hand, especially my disagreement in distinguishing between "main" and "secondary" complaints, I opt to refer to that opinion rather than restate the same arguments here.

(c) Having disagreed with points 12-14 of the operative provisions of the judgment and the corresponding paragraphs 469-472 of the text of the judgment, I also disagree with the dismissal of the remainder of the applicants' claim for costs and expenses under point 19 of the operative provisions.

3. I now turn to the part of my opinion which is concurring. I fully agree with the reasoning of the judgment leading to a violation of Article 2 of the Convention. However, I wish to refer to certain perspectives to further clarify my reasoning and provide additional insights into the matter, including humbly providing an explanation as to the legal basis, foundation and source of the environmental protection under Article 2 of the Convention as well as elaborating on some of the components of this protection.

4. By way of introduction, I consider it useful to refer to the Human Rights Committee's comment on the scope of the right to life:

"The right to life is a right that should not be interpreted narrowly. It concerns the entitlement of individuals to be free from acts and omissions that are intended or may be expected to cause their unnatural or premature death, as well as to enjoy a life with dignity."[28]

In this connection, reference should also be made to a significant observation made by Pikis, J., in a Cypriot case, namely, *Community of Pyrga and Others v. Republic of Cyprus and Others*, ((1991) 4 *Cyprus Law Reports* 3498, at p. 3507) where he profoundly noted that the right to life – referring to Article 7 § 1 of the Cyprus Constitution, which is based on Article 2 § 1 of the Convention – "is not limited to the protection of existence but also extends to the fundamental conditions necessary for human survival in the environment where one lives".

5. Having said the above, I humbly submit that one aspect of the right to life under Article 2 of the Convention – its protection against environmental pollution and other hazards – encompasses the sub-right to be free from environmental pollution or other environmental hazards that may endanger human life[29]. This sub-right is implied in Article 2, as it is in Article 8 and several other provisions of the Convention and it is no different from the sub-right to a healthy, clean and sustainable environment under the Convention which I dealt with in my concurring opinions in *Pavlov and Others v. Russia*, no. 31612/09, 11 October 2022, and *Kotov and Others v. Russia*, nos. 6142/18 and 13 others, 11 October 2022, where I also advocated the need for a new protocol dealing with a substantive right to a healthy, clean, safe and sustainable environment.

6. As I argued in those cases, the foundation of the environmental protection in the Convention is the norm of effectiveness enshrined in its provisions. It is the said norm of effectiveness, as a fundamental matrix or source which nurtures, generates and develops a right, in the present case the Article 2 right, taking into account the object and purpose of the Convention, in particular of Article 2, and which right also necessitates and entails the implicit right to a healthy environment, which is indispensable for the exercise and enjoyment of the right to respect for one's right to life. This sub-right of Article 2 is an implied or implicit human right of an environmental character. It is an implied right in the same way as the right of access to a court is an implied, ancillary or secondary right in relation to the right to a fair trial under Article 6 of the Convention (see *Golder v. the United Kingdom*, 21 February 1975, Series A no. 18).

7. The emergence of the sub-right in question under Article 2, from the norm of effectiveness, can be materialised through a broad, evolutive and dynamic interpretation given by the Court, aided by the living instrument doctrine (adapting the Convention to present-day conditions) and the developments of international law and the doctrine of positive obligations, according to which member States must take the necessary steps in order to ensure the exercise and enjoyment of the right to life free from environmental hazards. These two doctrines are, in my view, capacities or functions or dimensions of the principle of effectiveness as a norm of international law, vested as they are with a particular mission to assist in the development of the norm of effectiveness and to ensure that the Convention rights are always practical and effective. On the other hand, the principle of effectiveness as a method of interpretation can assist the norm of effectiveness in its pragmatic application in the particular circumstances of a case. Without the expansion of the norm of effectiveness and the development of this sub-right, one aspect of the right to life would be missing, completely unprotected, and in danger from environmental risks. Therefore, this sub-right or indirect right deriving from the norm of effectiveness is extremely important for the protection of the environment. As Kobylarz insightfully argues,

"Strasbourg's system of indirect protection of the environment can ensure, on the one hand, a more adequate response to the human-rights claims of today's society and, on the other hand, a more meaningful protection of the natural environment".[30]

8. The norm of effectiveness, underlying environmental protection under Article 2, is not to be found only within the "right" to life itself, but also within the scope of the "victim" of an alleged violation under Article 34 of the Convention. The term "victim" should be read in conjunction with the word "everyone" in Article 2 of the Convention, so as to include without discrimination every person who is a victim of a violation of an environmental character, like the applicants in the present case. It is, in my submission, the principle of effectiveness as a norm of international law and the interpretation made by the Court which broaden the scope of both the "right" and the "victim" so as to protect them from any environmental pollution and hazards.

9. I wish to emphasise the importance of due diligence as an element of the norm of effectiveness of the right to life in Article 2 and in particular its dimension consisting in the fulfilment by the member States of their positive obligations to protect human lives from environmental pollution and other hazards. In the context of human rights and international law, due diligence underscores the responsibility of States to take reasonable and proactive measures to prevent harm, uphold the right to life as well as other human rights, and ensure safety. In other words, due diligence requires that

States act with care and vigilance in fulfilling their obligations, including preventing harm, ensuring accountability, complying with international norms, like the rule of law and good faith and fulfilling proactive duties.

10. Due diligence, as enshrined in the norm of effectiveness of the right to life, requires member States to not only recognise this right in theory but also to ensure its practical realisation. It is within the Court's jurisdiction or sphere of competence to assess whether the State approached the problem with the required diligence given the nature and seriousness of the threat at issue (see paragraph 396 of the judgment)[31]. The due diligence standard has been expressed through a duty to take "reasonable and appropriate" measures[32]. In the context of due diligence and the principle of prevention under the right to a healthy environment as such, the following passage from the judgment adopted by the Inter-American Court on 4 July 2024 in *Caso Pueblo Indígena U'wa y sus miembros vs. Colombia* is very pertinent:

"293. ... the Court has emphasised that the principle of prevention of environmental damage forms part of customary international law, and entails the obligation of States to take such measures as may be necessary ex ante to the occurrence of environmental damage, taking into consideration that, due to its particularities, it will often not be possible, after such damage has occurred, to restore the previously existing situation. By virtue of this principle, States are obliged to use all means at their disposal to prevent activities under their jurisdiction from causing significant harm to the environment. This obligation must be fulfilled in keeping with the standard of due diligence, which must be appropriate and proportionate to the degree of risk of the environmental harm, which implies that in activities known to be more risky, such as the use of highly polluting substances, the obligation has a higher standard. On the other hand, the Court has pointed out that while it is not possible to enumerate of all the measures that could be adopted by States to comply with the obligation of prevention, a few, relating to potentially harmful activities, can, however, be identified. [Those are obligations to]: (i) regulate; (ii) supervise and monitor; (iii) require and approve environmental impact assessments; (iv) establish contingency plans; and (v) mitigate, when environmental damage has occurred."[33]

Timely action is a key component of due diligence, because it directly affects the ability to prevent harm, protect the right concerned, and ensure accountability.

In respect of "timeliness" as a part of due diligence, a pertinent principle from the Court's case-law is that the relevant measures must be applied in timely and effective manner[34]. Owing to the international obligation to prevent environmental damage and to minimise environmental risk, the promptness of the authorities' response to a dangerous situation of pollution acquires primordial importance[35], as rightly stressed in the present judgment at paragraph 396.

The norm of effectiveness, enshrined in Article 2 and other Convention provisions further reinforces the importance of timeliness. Rights must not only exist in theory but must also be meaningfully secured in practice. Untimely responses, even if well-intended, can fail to protect individuals adequately, rendering the right to life and other human rights not practical and effective but theoretical and illusory. Timeliness is also crucial in investigating and addressing rights violations. Member States are obligated to conduct prompt and thorough investigations into alleged violations to establish accountability and provide remedies.

11. Along with public participation in decision-making and access to justice, one important procedural element of the implicit right to a healthy environment which is indispensable for the exercise and enjoyment of the right to respect for one's right to life is the access to environmental information. Kobylarz pertinently argues:

"Under Article 2, the provision of essential information regarding life-endangering situations is part of the State's obligation to take preventive measures. Such information enables individuals to assess the risks to their life or health and to minimise the consequences of exposure. Applicability of Article 2 requires, on the part of the applicant, the occurrence of death or a life-threatening situation, including a lethal illness, and, on the part of the State, that the threat was known or ought to have been known."[36]

The present judgment rightly discusses the importance of access to environmental information in paragraph 382 (pertaining to general principles) and rightly concludes that this right was not respected in the present case (see paragraphs 454-458 where the Court makes its own assessment as to the application of the general principles, in particular under the heading "Whether the authorities took measures which were adequate under the circumstances" and sub-heading "Measures in connection with the provision of information". It is worth referring to what the judgment finds in paragraph 457:

"... that a pollution phenomenon of such magnitude, complexity, and seriousness required, as a response on the authorities' part, a comprehensive and accessible communication strategy, in order to inform the public proactively about the potential or actual health risks, and about the action being taken to manage these risks."

It is to be noted that access to environmental information, which can be considered as a sub-right to the said implicit right and part of its norm of effectiveness, has been recognised to exist, in addition to other provisions of the Convention, also within the scope of Article 2[37]. Having said that, I humbly submit that this sub-right should also have been enjoyed by the applicant associations (applicants nos. 15, 16, 17, 18 and 19).

12. In view of what is said in paragraphs 383-464 of the present judgment and in the present opinion, I conclude, as the judgment does in paragraph 465, namely, "that the Government have not established that the Italian authorities approached the *Terra dei Fuochi* problem with the diligence warranted by the seriousness of the situation" and "that they failed to demonstrate that the Italian State did all that could have been required of it to protect the applicants' lives". I, therefore, conclude, as the judgment does in paragraph 467, "that there has been a violation of Article 2 of the Convention".

13. Lastly, as regards the present judgment's section on the application of Article 46 of the Convention with which I fully agree, I wish to refer to my concurring opinion in *Georgiou v. Greece* (no. 57378/18, 14 March 2023), where I delved into the legal bases for the Court's power to contribute to the implementation of its own judgments and explained the difference between implementation and execution of its judgments. Within the framework of these legal bases, I included the principle of effectiveness as a norm of international law, to which I have also referred in this opinion in a different context.