



**STATE INSPECTORATE
REPUBLIC OF CROATIA**

Environmental Inspectors and ELD Enforcement

Case Study on Land Contamination

Miljenka Kliček
Head of Regional Environmental Inspection Service
Regional Office Varaždin

**State Inspectorate
Republic of Croatia**

Content

- 1. Legal framework**
- 2. ELD implementation and enforcement in Croatia**
- 3. The installation in question**
- 4. Inspection findings**
- 5. Inspection enforcement**
- 6. Crime investigation**
- 7. Conclusion**

Legal Framework

- **Environmental Protection Act (Official Gazette No. 80/13, 153/13, 78/15, 12/18 i 118/18), Chapter X**
 - **Regulation on Liability for Environmental Damage, OG 31/17, 50/20**
 - **Ordinance on Measures for Removal of Environmental Damage and Recovery Programmes, OG 145/08**
- **Nature protection act, OG 80/13,15/18,14/19,127/19**
- **Waters act, OG 96/19**
- **Agricultural land act, OG 20/18, 115/18**
- **Law on fertilizers and soil improvers, OG 163/03**



ELD implementation in Croatia

Competent authorities:

- Ministry of Economy and Sustainable Development
- Ministry of agriculture



REPUBLIKA HRVATSKA
Ministarstvo gospodarstva
i održivog razvoja



REPUBLIKA HRVATSKA
Ministarstvo
poljoprivrede



ELD enforcement in Croatia

Competent authority for
ELD enforcement in Croatia is



REPUBLIKA HRVATSKA
Državni inspektorat

State Inspectorate:

Environmental inspection
Water inspection
Nature protection inspection
Agriculture inspection



State Inspectorate - concept

LEGAL FRAMEWORK FOR CONDUCTING INSPECTION AFFAIRS

STATE INSPECTORATE ACT SET COMMON GENERAL RULES FOR CONDUCTING CONTROL OF LEGAL AND NATURAL PERSONS

HUMAN RESOURCES

UNIQUE PROFESSIONAL CONDITIONS FOR ALL INSPECTION POSITION, CREATING A KNOW - HOW IN PERFORMING INSPECTION AFFAIRS

AUTONOMY AND INDEPENDENCE IN PERFORMING TASKS

ENFORCEMENT OF REGULATIONS IN INDEPENDENT BODY, SEPARATED FROM MINISTRIES WHO ARE CARRIERS OF THE LEGAL FRAMEWORK



FUNCTIONALITY

ALL INSPECTIONS RELATED AFFAIRS WITHIN THE SAME BODY ENABLE PLANNED, COORDINATED AND SYSTEMIC APPROACH TO SUPERVISORY

COMMUNICATION AND TRANSPARENCY TO ALL USERS

INSTEAD OF COMMUNICATIONS WITH 8 MINISTRIES, ENTREPRENEURS, CONSUMERS AND OTHER USERS ARE DIRECTED TOWARDS ONE BODY

COST-EFFECIVENESS

USE OF COMMON VEHICLES, EQUIPMENT AND OTHER MEANS OF WORK

State Inspectorate - structure



- Headquarters in Zagreb
- Regional offices in Osijek, Rijeka, Split, Varaždin and Zagreb

Environmental Protection Inspection (EPI)

61 inspectors (in 2021) in total operating through the Central office in Zagreb and 5 Regional offices

Case study - the installation in question

- **Metal processing company**
- **Surface treatment processes (shot blasting and spraying)**



Inspection findings



During the routine inspection on site inspector found that construction works on new fence were going on. He noticed that some barrels were buried on site.

Inspection enforcement (1)



Inspector ordered the operator to dig out all buried barrels.



Inspection enforcement (2) – soil analysis

Environmental Inspector issued the operator the decision to sample and analyse the waste and contaminated soil by licenced laboratory.

The thresholds about contamination of agriculture land from harmful substances, from national legislation - Ordinance on the Protection of Agricultural Land from Contamination were implemented.

Findings of contamination in the agriculture land outside the fence declared as pasture were comparated with thresholds. The results of analyses showed significant noncompliances.

Land contamination- results

The thresholds about contamination of agriculture land from harmful substances, from national legislation - Ordinance on the Protection of Agricultural Land from Contamination.

Example for heavy metals thresholds:

mg kg-1	Cd	Cr	Cu	Hg	Ni	Pb	Zn
Sandy soil	0,0-0,5	0-40	0-60	0,0-0,5	0-30	0-50	0-60
Powdery-loamy soil	0,5-1,0	40-80	60-90	0,5-1,0	30-50	50-100	60-150
Clay soil	1,0-2,0	80-120	90-120	1,0-1,5	50-75	100-150	150-200

Findings of contamination in the agriculture land outside the fence (declared as pasture):

- 504,0 mg/kg of lead (Pb)*
- 56,9 mg/kg of chromium (Cr)*
- 26,5 mg/kg of nickel (Ni)*

Inspection enforcement (3)



Operator was obliged to remove all the waste and contaminated soil and give it to the licenced company.



Inspection enforcement (4) - the magnitude of event

Approximately 250 m² of surface of contaminated soil

- 1. 16.750 kg of waste 08 01 11* (waste paint and varnish containing organic solvents or other dangerous substances)*
- 2. 29.120 kg of waste 12 01 02 (ferrous metal dust and particles) – shot blasting dust*
- 3. 13.340 kg of waste 12 01 01 (ferrous metal filings and turnings)*
- 4. 28.120 kg of waste 17 05 05* (dredging soil containing dangerous substances, outside of the fence) – contaminated soil*

Inspection enforcement (5) - polluter pays principle

Operator obeyed the Inspection Decision and removed all the waste and contaminated soil. All expenses of sampling and analysis of waste and contaminated soil, removing the waste and soil by authorised company were paid by the operator.

Environmental Protection Inspector also started misdemeanour procedure in the Court. The operator was declared guilty and punished with financial fine. He did not use his right to appeal, but paid the fine.

Crime investigation

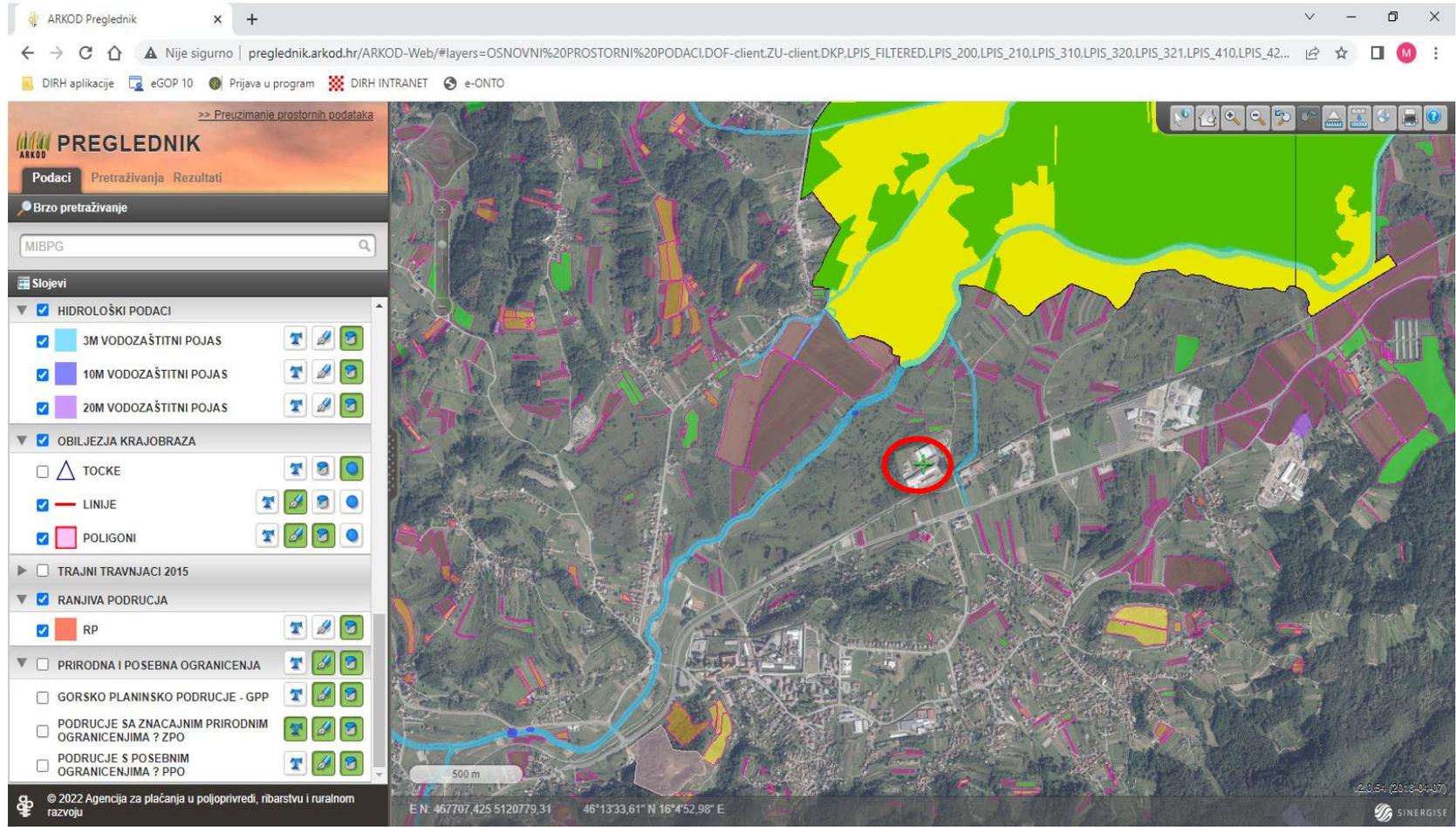
In crime procedure the District Attorney's Office has indicted the operator for endangering the environment with waste. The indictment was upheld in court. The final judgment was rendered. The operator was found guilty and fined. The operator's responsible person was punished with 8 months in prison, what was replaced by probation.



Environmental liability application

- *The screening in observed case was done by the Environmental Protection Inspector according to his findings in on-site inspection. These findings were complemented by investigation of the land use and the existence of protected species and/or natural habitats on the contaminated area or in the vicinity of contaminated area*
- *The described case was not considered as environmental liability case, but other environmental national legislation was implemented*
- *Polluter pays principle was fully implemented*

ARKOD – land use database



Conclusion

- The clear decision about the appearance of the environmental damage was very difficult to deliver. It is related to the determination of 'measurable' and 'significant' **adverse effects** as well as of the consequences over time to the environmental resources.
- Coordination between different competent authorities is crucial for delivering the decision about the environmental damage.
- Continuous improving of practical knowledge, skills and competences among all stakeholders is necessary for environmental damage prevention as well as for recognition and processing of ELD cases.
- **The guide on the criteria for the determination of the environmental damage and imminent threat of environmental damage, focused on the aspects of the ascertainment would help to consist approach and overcome problems in the enforcement of ELD**

Thank you for your attention



Croatian Nacional park Plitvice lakes

MILJENKA KLIČEK

miljenka.klicek@dirh.hr

00385 91 28 77 176

00385 42 301 681