



Ukraine



Contaminated Sites Management *Joint UMOE-DEPA Project*

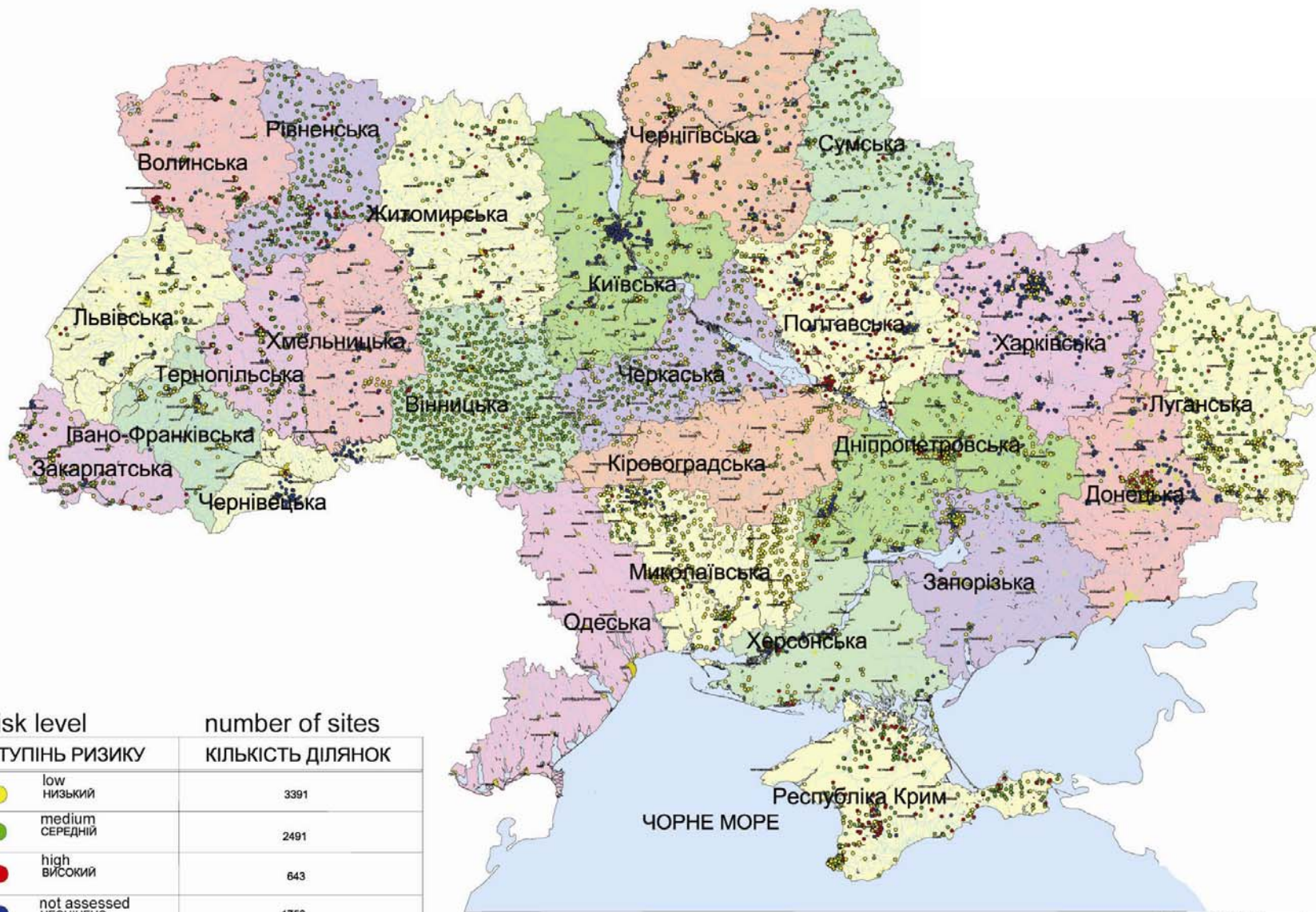
Petro Nakhaba

All-Ukrainian Public Organization “Chysta Khvylya”

Deputy Head

Kyiv, Ukraine

UKRAINE



risk level	number of sites
СТУПІНЬ РИЗИКУ	КІЛЬКІСТЬ ДІЛЯНОК
low низький	3391
medium СЕРЕДНІЙ	2491
high високий	643
not assessed НЕОЦІНЕНО	1752
total ЗАГАЛЬНА КІЛЬКІСТЬ ДІЛЯНОК: 8277	

Map of 8277 contaminated and potentially contaminated sites

NATIONAL REPORT OF UKRAINE ON HARMONIZATION OF SOCIETY'S ACTIVITY IN NATURAL ENVIRONMENT

Special publication on the occasion
of the 5th Pan-European Ministerial Conference
"Environment for Europe"



Kyiv- 2003

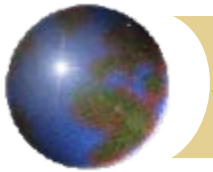
Public Council of All-Ukrainian Environmental NGOs
under the aegis of the Ministry of the Environment and Natural Resources
of Ukraine

Organising Committee of Ukrainian Environmental NGOs for preparation to
Fifth Pan-European Ministerial Conference "Environment for Europe"

Public Evaluation of Environmental Policy in Ukraine

Report of Ukrainian Environmental NGOs

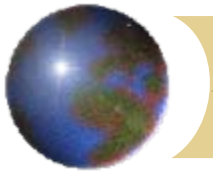
Kyiv — 2003



Contaminated Sites Management

Overall objectives of the project:

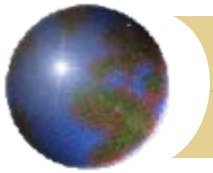
- ❖ To implement systematic inventorying procedures for sites where hazardous chemical substances have been or possibly might have been stored or leached into the soil and evaluate and give priority to such sites according to risks
- ❖ To train the oblast (local) staff in carrying out remediation activities



Contaminated Sites Management

Four components of the project:

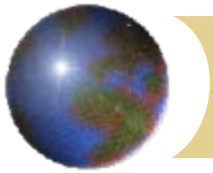
- ✿ Inventory of contaminated or potentially contaminated sites
- ✿ Legal aspects of contaminated sites management
- ✿ Remediation of contaminated sites
- ✿ Prevention of new contamination



Outputs of Project

Inventory of contaminated or potentially contaminated sites:

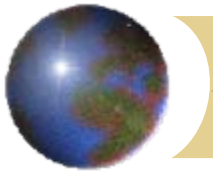
- ✿ Preparation of the methodology including ranking system
- ✿ Preparation of database
- ✿ Training of oblast personal in inventorying procedures
- ✿ Provision of equipment for the inventory



Outputs of Project

Legal aspects:

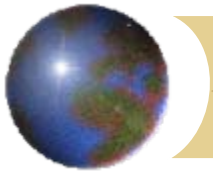
- ✦ Review of legal settings
- ✦ Gap analysis
- ✦ Compendium of existing legislation concerning hazardous waste and soil contamination



Outputs of Project

Remediation of contaminated sites

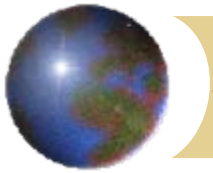
- ✦ Training of oblast personal in remediation activities
- ✦ Guidelines in remediation of contaminated sites
- ✦ Model projects demonstrating relevant technical aspects and management approaches



Outputs of Project

Prevention of new contamination:

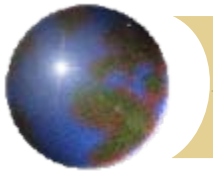
- ✚ Guidelines in siting of new landfills



Results

Inventorying:

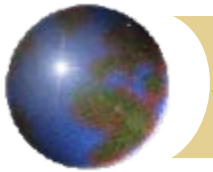
- ✦ A total of approximately 13.000 contaminated and potentially contaminated sites have been inventoried
- ✦ 8 300 have coordinates and 7 200 have sufficient information to evaluate risks for human exposure through contaminated groundwater and surface waters, contaminated topsoil and releases of toxic gases from storages above ground



Results

Inventorying:

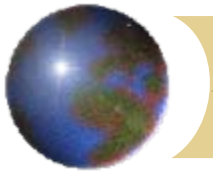
- ✦ It was not possible to provide specific data on the degree of contamination on each site
- ✦ The main challenge in the inventorying process has been to identify the relevant sites, whereof it was expected that many for some reason are not registered within the regulatory system



Results

Inventorying - Database System:

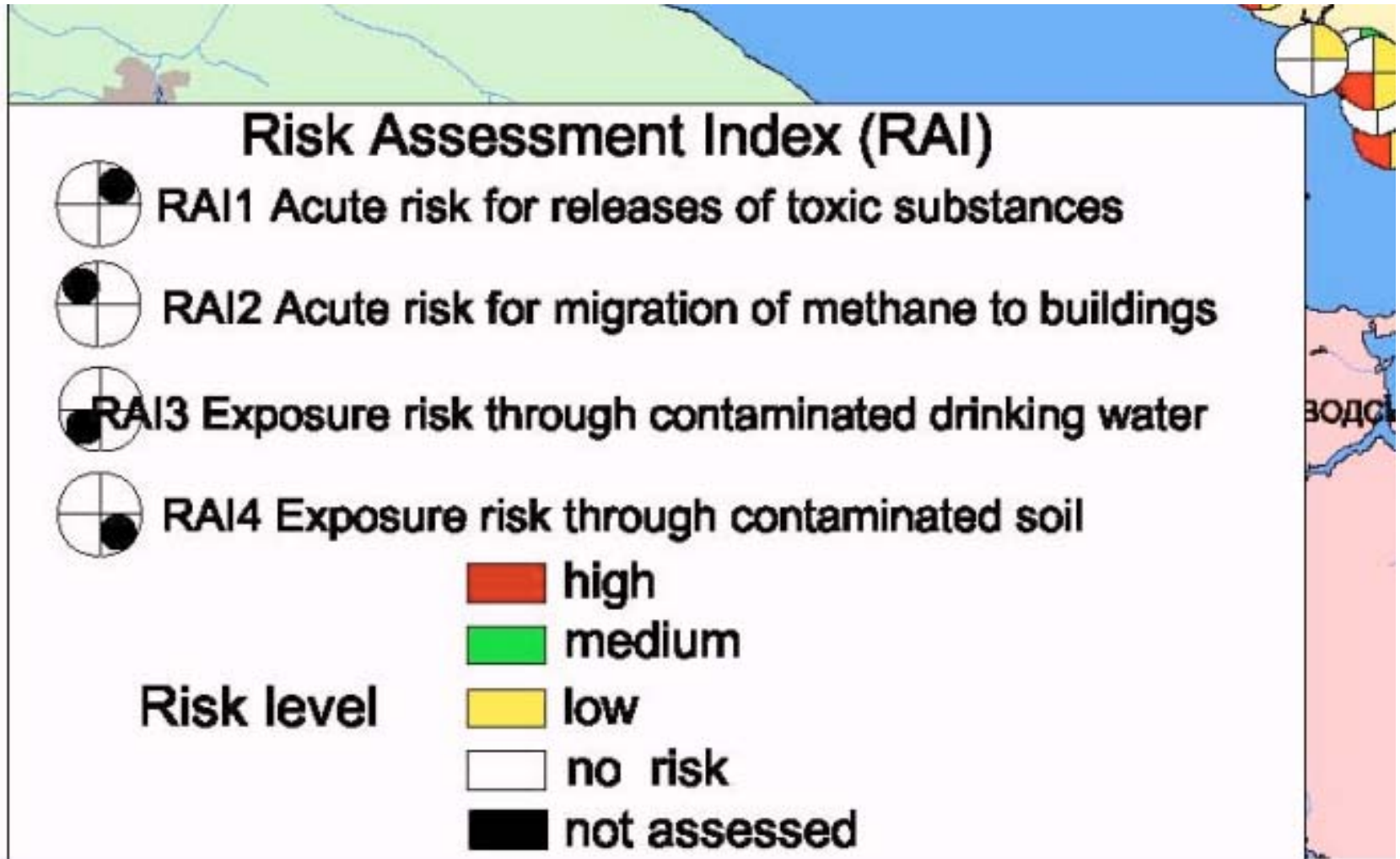
- ❖ A database system for the inventorying was designed and prepared within the framework of the existing "Chestnut" system developed by National Centre for Hazardous Waste Management for environmental management of information related to facilities of generation, processing, recycling and disposal of waste



Results

Inventorying - Risk assessment and ranking:

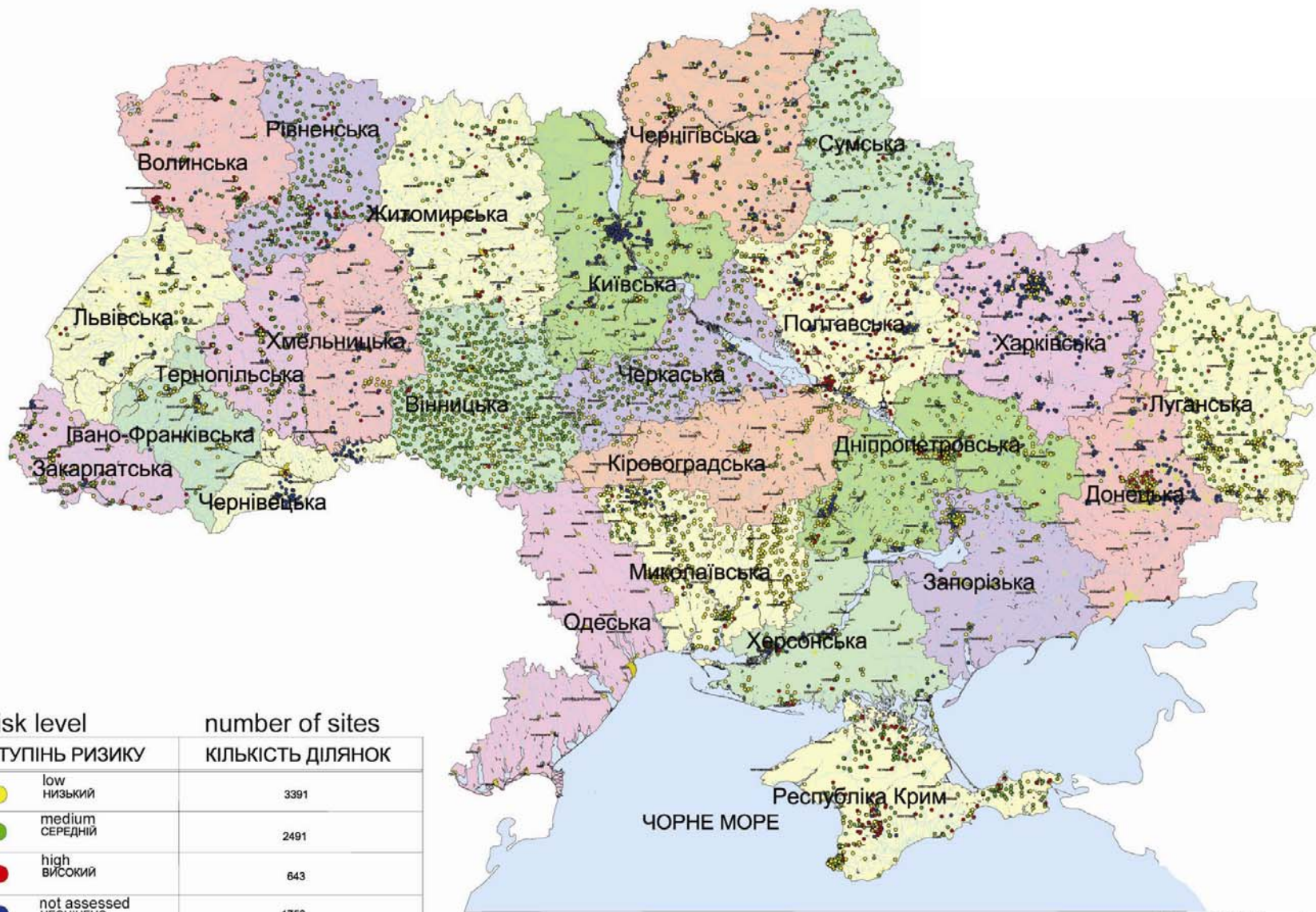
- ⊕ Acute risk for releases of toxic substances into the air environment
- ⊕ Acute risk caused by migration of methane from waste sites to buildings
- ⊕ Exposure risk through contaminated drinking water
- ⊕ Exposure risk through contaminated soil





Type	Number registered November 2004
Industry	1497
Mining	270
Oil refinery	3
Leakages from pipelines	23
PCB-objects	84
Power plants	76
Storage of hazardous waste	479
Pesticide storage	3725
Oil depots	855
Storage of other chemicals	134
Landfills	2883
Slag and ashes	131
Scrap yards	129
Military sites	24
Other	1475
Total	11788*)

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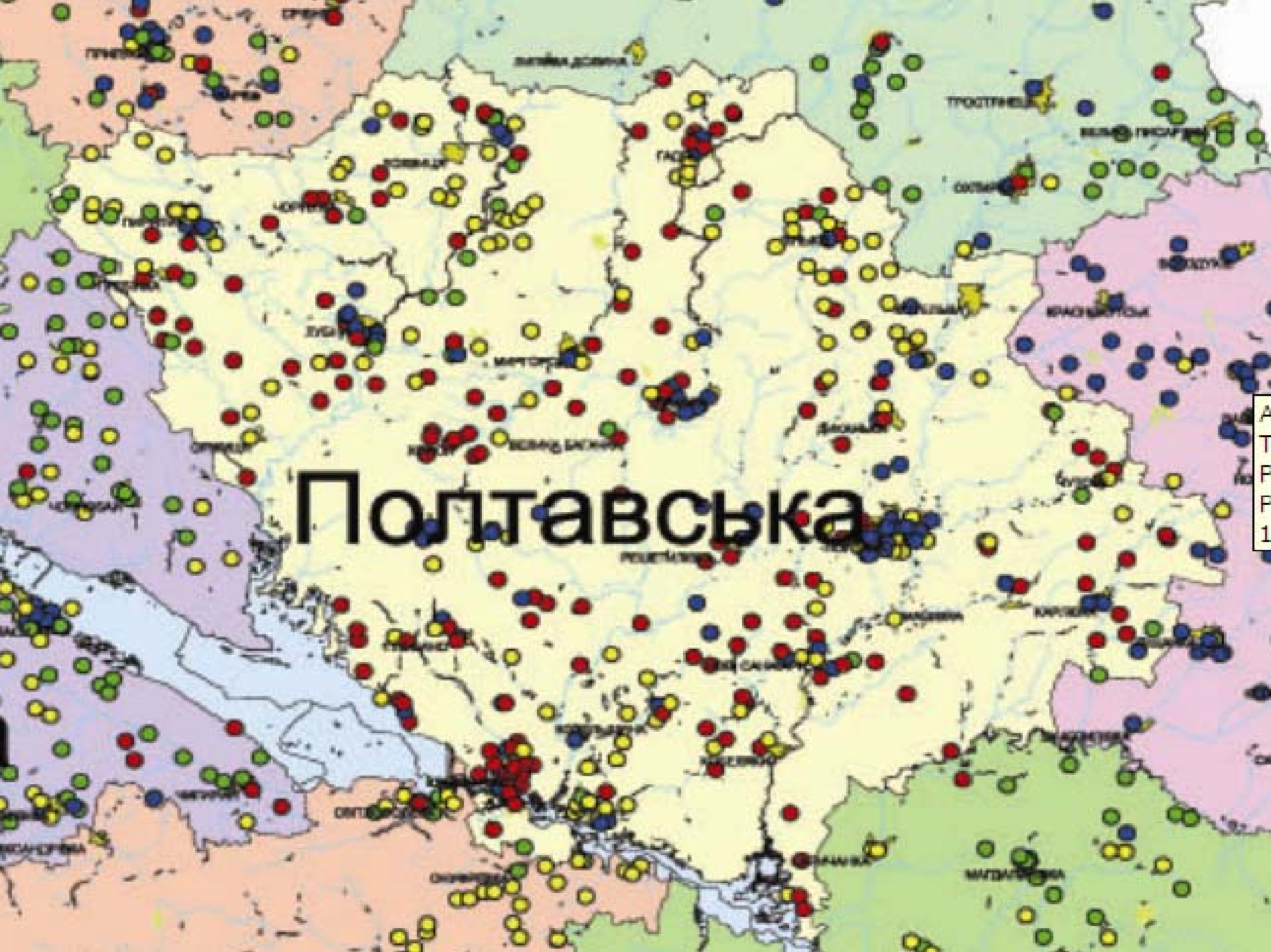


risk level СТУПІНЬ РИЗИКУ	number of sites КІЛЬКІСТЬ ДІЛЯНОК
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Республіка Крим
ЧОРНЕ МОРЕ

Map of 8277 contaminated and potentially contaminated sites

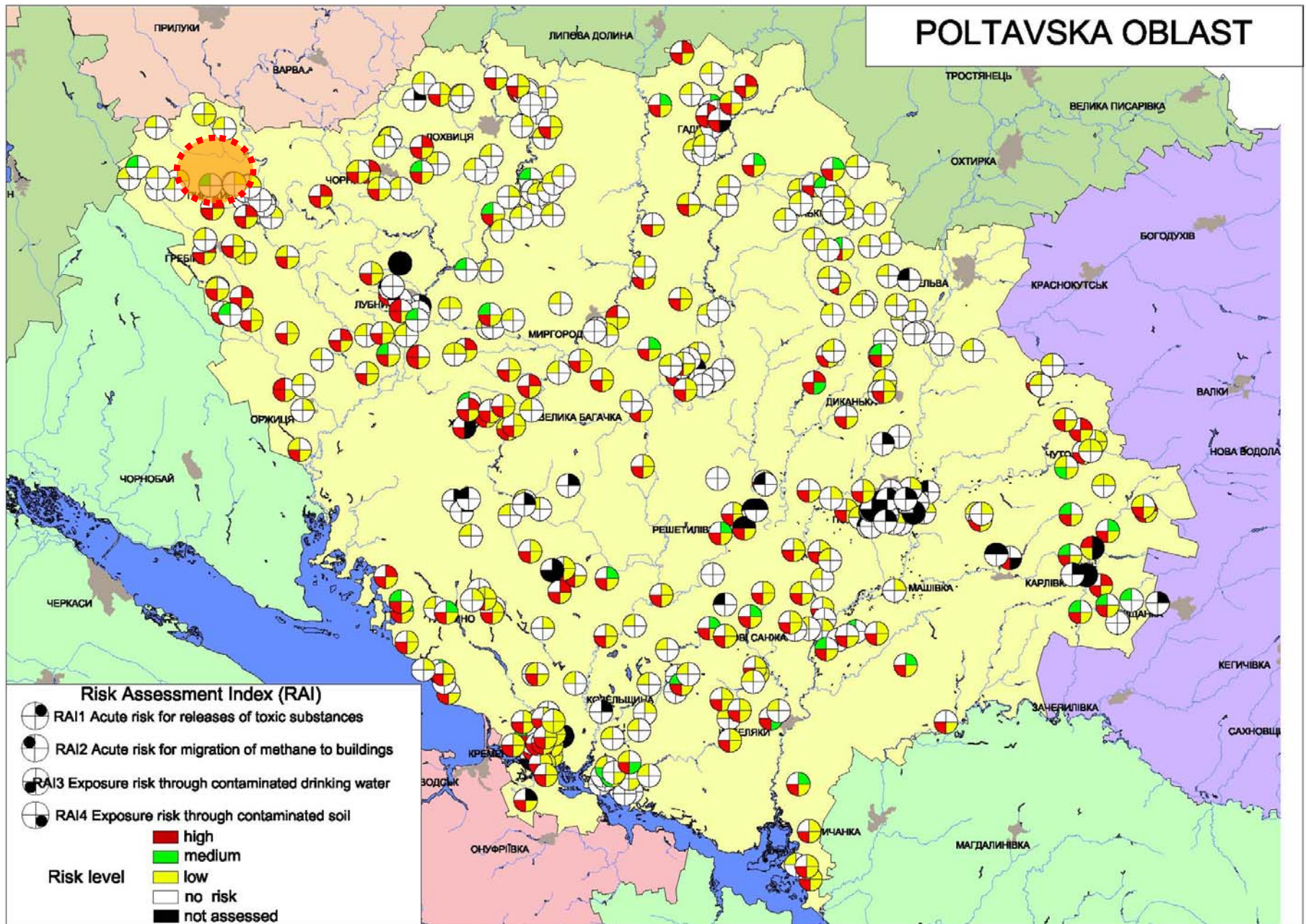
Карту підготовлено НАЦІОНАЛЬНИМ ЦЕНТРОМ ПОВИДКЕННЯ З НЕБЕЗПЕЧНИМИ ВІДХОДАМИ
в рамках проекту ДОПОМОГА УКРАЇНСЬКИМ ОРГАНІМ ВЛАДИ В УПРАВЛІННІ ЗАБРУДНЕНИМИ ТА ПОТЕНЦІЙНО ЗАБРУДНЕНИМИ ДІЛЯКАМИ

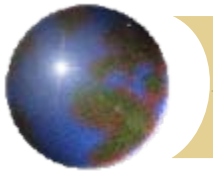


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POLTAVSKA OBLAST

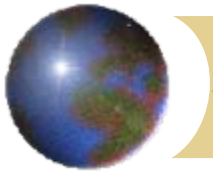




Results

Legal aspects:

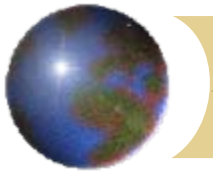
- ✚ Inventory of regulation targeting waste in general and hazardous waste in particular
- ✚ Report evaluating existing legal framework and giving recommendations for mitigation of gaps identified



Results

Remediation:

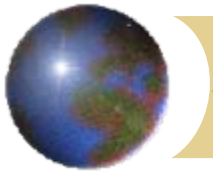
- ✿ Practical training through demonstration projects
- ✿ Training course on remediation aspects and approaches



Results

Remediation:

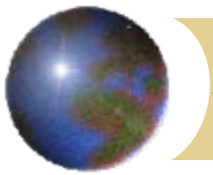
- ⊕ Project management and tendering
- ⊕ Contaminants behaviour in soil and groundwater, introduction to geology and hydro-geology
- ⊕ Drilling and sampling
- ⊕ Chemical analyses
- ⊕ Site surveys
- ⊕ Risk assessment
- ⊕ Remediation techniques
- ⊕ Health and safety procedures



Results

Prevention of new contamination:

- ❖ A guideline in siting of new landfills have been prepared and further introduced to at the training course held in November 2004



Thank you for your attention !

A few minutes about POPs

Stockholm Convention Implementation