What are the Persistent Organic Pollutants (POPs)?

Persistent Organic Pollutants (POPs) are the organic chemicals that are/have:

- toxic effects on living organisms and the environment,
- accumulated in fatty tissue in organisms, persistent in the environment (because of the stable structure, resist to undergo any photolytic, chemical and biological reactions),
- semi-volatile characteristics, capable of long range transboundary atmospheric transport and posing a global environmental problem.
 These substances can cause birth defects and injuries, cancers, disruption of immune systems and reproductive system problems.

How POPs have emerged and how these chemicals are managed?

Since the first half of the last century, Persistent Organic Pollutants have been developed in the industry and used in a wide range of chemical substances, and mixtures of them (e.g. pesticides, insecticides, dielectric and hydraulic fluids in industrial machinery, capacitors and transformers). Recently it has also been used as chemical additives in products such as flame retardants and water repellents especially in the construction materials, textile, automotive industry. Moreover, POPs are unintentionally generated in a wide range of processes involving combustion;i.e; waste incineration facilities, including cement kilns where the hazardous wastes have been burned, production of pulp using elemental chlorine or chemicals generating chlorine during bleaching, and thermal processes in the metallurgical industry, etc.

Also, there has been an increase in the production of chemicals with the development of industry and technology towards the end of 1800s. The adventure started with the production of DDT in 1874 has continued with the production of various industrial chemicals. However, in parallel with the industrial development in the 1960s, scientific developments also manifested themselves and scientists conducted and reported studies on the damage caused by these industrial chemicals and pesticides on the human health and environment. Thereafter, DDT was banned all over the world, and later PCBs were banned in the USA. Following the UNEP Decision on POPs from the 90s onwards with the signing of CLRTAP and Stockholm Convention, serious attempts have been made with the prohibition of the production and use of these chemicals, the reduction of unintentionally produced POPs and listing the new chemicals in the annexes of the convention as result of the scientific and technological developments. Turkey signed the Stockholm Convention on 23 May 2001 and became a party by 12 January 2010. In addition, the Ministry of Environment and Urbanization published the "Regulation on Persistent Organic Pollutants" with No. 30595, on 14 November 2018.

Regulation on Control of Soil Pollution and Sites Contaminated by Point Sources

The identification, registration and monitoring of the contaminated, or possibly contaminated sites, identification of the sites to be cleaned and cleaning methods and criteria have been defined within the "Regulation on Control of Soil Pollution and Sites Contaminated by Point Sources" (Regulation) published in the Official Gazette No. 27605 and dated 08.06.2010.

The Regulation has been implemented through "Contaminated Sites Information System (CSIS)". The CSIS has been developed to store, update and maintain the inventory data about the point-sources contaminated and possibly contaminated sites and, when necessary, enable quick access to this information. The information system is accessed through https://ecbs.cevre.gov.tr

Who Should Notify?

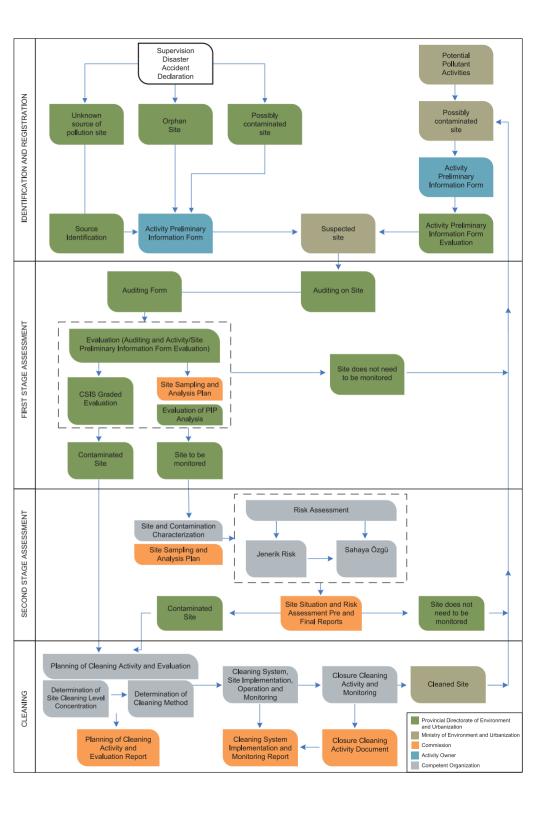
The sectors on the "List of Potentially Soil Polluting Activities and Activity-Specific Pollution Indicator Parameters" given in Annex-2 of the Regulation should fill the "Activity Briefing Form" in Annex-3, and make a notification through the CSIS.

When to Renew the Notification?

In case of a change in the data and information in the "Activity Briefing Form" given in Annex-3, the activity owners are required to log-into the system within 30 days and update their data and information accordingly.

Remediation of the Contaminated Sites

The contaminated or possibly contaminated sites are identified and assessed through CSIS. After the assessment, the Ministry carry out activities for the sites needs to be remediated.



Identification and Remediation of Contaminated Sites with Persistent Organic Pollutants Project

The project was designed using an analytical and participative process to ensure alignment with the EU acquis on chemicals and contaminated sites management and respond to the national dynamics.

"Identification and Remediation of Contaminated Sites with Persistent Organic Pollutants (POPs)" project has two main components:

Part A – Technical Assistance for strengthening technical and institutional capacity for management of POPs contaminated sites and identification and classification of contaminated sites with POPs: This component aims to improve the capacity of all relevant stakeholders at central and local level so that (i) there is a strengthened technical and institutional capacity for management of POPs contaminated sites, and (ii) POPs contaminated sites were properly identified and classified.

Part B – Works for increasing the institutional experience for remediation of POPs contaminated sites: This component aims to build a "capacity" for implementation of remediation activities in Turkey in line with EU regulations and standards.

Project Activities

1. Strengthening technical and institutional capacity for the management of contaminated sites with POPs

Activity 1.1: Trainings for those working on POPs/contaminated sites, including target groups from central and local authorities and private sector.

Activity 1.2. Legal Gap Analysis (LGA)/Guidance Documents/Publications Preparations and Update Activity 1.3. Study Visits Activity 1.4. Establishment of Helpdesk

2. Identification and Classification of Contaminated Sites with POPs

Navigator Software Programme

Activity 2.1. Update of CSIS Software Activity 2.2. Identification and Classification of POPs Contaminated Sites in Turkey Activity 2.3. Prioritization of POPs/Persistent Toxic Substances Contaminated Sites for

Activity 2.4. Selection of Two Pilot Areas among the Prioritized Contaminated Sites in Activity 2.3 Activity 2.5. Preparation of Operational Plan for 2 pilot sites

Activity 2.6. Preparation of a Supervision and Monitoring Plan for 2 pilot sites

Activity 2.7. Preparation of Technical Specification for 2 Pilot Sites for Pilot Application
Activity 2.8. Implementation of Supervision Support and Monitoring Plan for 2 Pilot Sites

3: Pilot Remediation Studies

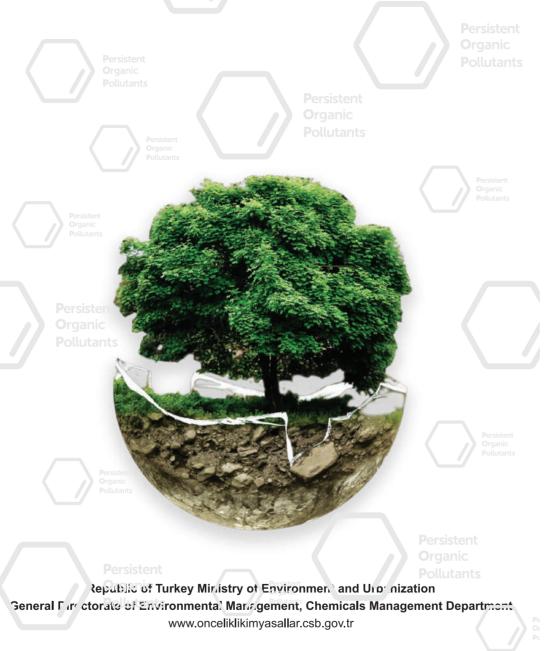
2 pilot sahanın iyileştirilmesi ve rehabilitasyonu yapılacaktır.

Project web site:

https://kalicikirleticiler.com/en/identification-andremediation-of-contaminated-sites-with-persiste nt-organic-pollutants-project/

List of Abbreviations

| CLRTAP | Convention on Long-Range Transboundary Air Pollution |
|--------|---|
| CSIS | Contaminated Sites Information System |
| DDT | Dichlorodiphenyltrichloroethane |
| LGA | Legal Gap Analysis |
| PCB | Polychlorinated biphenyl |
| POPs | Persistent Organic Pollutants |
| PIPs | Pollution Indicator Parameters |



General Directorate of European Union and Foreign Relations

www.ipa.gov.tr/

United Nations Development Programm : www.tr.undp.org/content/turkey/tr/home/projects. html

Persistent
Organic
Pollutants



This project is co-financed by the European Union and the Republic of Turkey.

Identification and Remediation of Contaminated Sites with Persistent Organic Pollutants Project











