

**Working Document**  
Management of Obsolete  
Pesticides

**Turkmenistan**



Food and Agriculture  
Organization of the  
United Nations



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## Part I – The Assessment of the legal framework on the pesticides waste management in Turkmenistan

### Section I: General background information (International Treaties participation)

#### **The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (general information regarding statute of adaptation, signing and ratification, Focal Point Institute)**

This convention was adopted on 10 September 1998 by the Conference of Plenipotentiaries on the Convention in Rotterdam, the Netherlands. In accordance with its Article 24, the Convention was open for signature at Rotterdam by all States and regional economic integration organizations on 11 September 1998, and subsequently at United Nations Headquarters in New York from 12 September 1998 to 10 September 1999.

Turkmenistan is not a party to this convention

#### **The Stockholm Convention on Persistent Organic Pollutants (general information regarding statute of adaptation, signing and ratification, Focal Point Institute)**

This convention was adopted on 22 May 2001 at the Conference of Plenipotentiaries on the Stockholm Convention on Persistent Organic Pollutants, Stockholm, 22-23 May 2001. In accordance with its Article 24, the Convention was open for signature at Stockholm by all States and by regional economic integration organizations on 23 May 2001 at the Stockholm City Conference Centre/Folkets Hus, and at the United Nations Headquarters in New York from 24 May 2001 to 22 May 2002.

Turkmenistan is not a party to this Convention

#### **The Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal (general information regarding statute of adaptation, signing and ratification, Focal Point Institute)**

This convention was adopted on 22 March 1989 by the Conference of Plenipotentiaries which was convened at Basel from 20 to 22 March 1989. In accordance with its Article 21, the Convention, which was open for signature at the Federal Department of Foreign Affairs of Switzerland in Berne from 23 March 1989 to 30 June 1989, was open thereafter at the Headquarters of the United Nations in New York until 22 March 1990.

This Convention was accessed by Turkmenistan in 26 september 1996

#### **International Agreements**

Turkmenistan is part to the **Framework Convention for the Protection of the Marine Environment of the Caspian Sea** (Tehran, November 4, 2003). The Convention is related to the cooperation in the field of discharges, emissions and disposal of hazardous, harmful and other pollutants and waste from sources in the sea and on the land. The participants are all littoral states. Within the Convention there were adopted:

1. **Protocol Concerning Regional Preparedness**, Response and cooperation in the event of incidents of oil pollution to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (2012);
2. **Protocol on the Protection of the Caspian Sea** against pollution from land-based sources and land-based activities to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (2012).

In accordance with Article 19 of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea, parties agreed to make efforts for creating and implementing individual and/or joint programs for monitoring the state of the marine environment of the Caspian Sea. The parties agreed on a list of parameters and pollutants discharge into and concentration in the Caspian Sea that are subject to monitoring.

The parties do perform regularly, either by themselves and/or jointly, the assessment of the marine environment of the Caspian Sea. The assessment also covers the effectiveness of measures taken to prevent, reduce and control pollution of the marine environment of the Caspian Sea. The Parties shall endeavor to harmonize rules for implementing and monitoring the programs, measurement systems, analytical techniques, data processing and data quality assessment.

The parties have agreed to develop a centralized database which is the basis for decision-making and general source of information and education for professionals, administrators and the public.

In accordance with Article 20 of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea, the

parties agreed to cooperate in the research and development of effective methods in order to prevent, reduce and control pollution of the marine environment of the Caspian Sea, for which the Parties shall endeavor to initiate or intensify, as appropriate, Research and development see details in Theme 16 on page 12

## Section II: Regulatory framework on waste management

Chapter I Political and Legal Framework	<p><b>National Laws and regulations that govern hazardous waste (especially OP) management</b></p> <p>Turkmenistan has not yet developed a special law on waste, providing state regulation organizing the collection and disposal of waste, including hazardous waste. However, in a number of legal acts there are separate regulations governing waste management.</p> <ol style="list-style-type: none"> <li>1. The Law of Turkmenistan "On Protection of Nature" (2014)</li> <li>2. The Law of Turkmenistan "On Protection of Atmospheric Air" (1996)</li> <li>3. Sanitary Code of Turkmenistan (2009)</li> <li>4. The Law of Turkmenistan "On Radiation Safety" (2009)</li> <li>5. The Law of Turkmenistan "On Chemical Safety" (2011)</li> <li>6. The Law of Turkmenistan "On Hydrocarbon Resources" (2008)</li> <li>7. Law of Turkmenistan "On Ecological Expertise" (2014)</li> <li>8. The Law of Turkmenistan "On licensing certain types of activities (2009)</li> <li>9. Regulation of the state environmental review, approved by the President of Turkmenistan (1996)</li> <li>10. The National Plan for the Prevention and Turkmen oil spill, approved by the President of Turkmenistan (2001)</li> <li>11. Rules for protection of coastal waters of Turkmenistan from pollution from ships, approved by the Decree of the President of Turkmenistan (2005)</li> <li>12. The Criminal Code of Turkmenistan (2010) and the Code of Turkmenistan "On Administrative Offences" (2013)</li> <li>13. Safety rules for the oil and gas industry (1995)</li> <li>14. Procedure movement across the border of Turkmenistan and dangerous military goods (transit), approved by Presidential Decree (2003)</li> <li>15. Presidential Decree "On matters of import licensing, production and sales of chemicals" (2010)</li> </ol>		
Chapter II Specific Laws and Regulations that govern waste management	<b>Sector</b>	<b>EU legislation</b>	<b>Turkmenistan legislation</b>
	General waste management	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance), OJ L 312, 22.11.2008, p. 3–30	<ol style="list-style-type: none"> <li>1. The Law of Turkmenistan "On Protection of Nature" (2014)</li> <li>2. The Law of Turkmenistan "On Protection of Atmospheric Air" (1996)</li> <li>3. The Criminal Code of Turkmenistan (2010)</li> <li>4. Code of Turkmenistan "On Administrative Offences" (2013)</li> <li>5. Rules for protection of coastal waters of Turkmenistan from pollution from ships, approved by the Decree of the President of Turkmenistan (2005)</li> <li>6. Sanitary Code of Turkmenistan (2009)</li> <li>7. The Law of Turkmenistan "On Radiation Safety" (2009)</li> <li>8. The Law of Turkmenistan "On Chemical Safety" (2011)</li> <li>9. The Law of Turkmenistan "On Hydrocarbon Resources" (2008)</li> <li>10. The Law of Turkmenistan "On licensing certain types of activities (2009)</li> </ol>

		<p>11. Law of Turkmenistan "On Ecological Expertise" (2014)</p> <p>12. Regulation of the state environmental review, approved by the President of Turkmenistan (1996)</p> <p>13. The National Plan for the Prevention and Turkmen oil spill, approved by the President of Turkmenistan (2001)</p> <p>14. Rules for protection of coastal waters of Turkmenistan from pollution from ships, approved by the Decree of the President of Turkmenistan (2005)</p> <p>15. Safety rules for the oil and gas industry (1995)</p> <p>16. Procedure movement across the border of Turkmenistan and dangerous military goods (transit), approved by Presidential Decree (2003)</p> <p>17. Presidential Decree "On matters of import licensing, production and sales of chemicals" (2010)</p>
<i>Import/Export</i>	<p>Regulation (EC) No. 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals, OJ L 204, 31.7.2008, p. 1–35.</p> <p>Regulation (EU) No. 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals Text with EEA relevance, OJ L 201, 27.7.2012, p. 60–106</p>	<p><b>The Law of Turkmenistan "On Protection of Nature" (2014)</b> prohibits the export and import of hazardous waste.</p> <p>Hazardous was treatment in special plants, their disposal in landfills and storage are produced with the permission of the authorized body of state administration in the field of environmental protection and other authorized state agencies</p> <p>Landfill disposal of hazardous waste in the vicinity of cities and other settlements, in irrigated areas, water bodies, including in the waters of the Turkmen sector of the Caspian Sea, and on the lands of water fund, in the resort, medical and sanitary, recreational areas and other places where there may be a danger to human health and the environment. (Article 37). <b>The Law of Turkmenistan "On Radiation Safety" (2009)</b> prohibits the importation of radioactive waste in Turkmenistan for the storage and disposal (Article 12). <b>The Law "On Chemical Safety" (2011)</b> provides for state control over the import of dangerous chemicals and their precursors, including dual-use chemicals, as well as the associated technical and chemical process equipment on the territory of Turkmenistan, their export and transit (Art. 5)</p>
<i>Landfill of waste</i>	<p>Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ L 182, 16.7.1999, p. 1–19</p>	<p><b>The Law of Turkmenistan "On Protection of Nature" (2014)</b> defines the areas where the landfill is prohibited.</p> <p><b>The Law of Turkmenistan "On Protection of Atmospheric Air" (1996)</b> The law specifies the requirements for placement, treatment and disposal of industrial and domestic waste. Burial, only waste that cannot be recycled and should be disposed of in</p>

			<p>special landfills (Art. 23).</p> <p>This is the full text of the article “Industrial solid waste, industrial and household waste that are sources of air pollution products combustion, decomposition, fire, harmful gaseous substances, including mercury and fluorescent lamps, rubber goods, container out of fuel and lubricants, and other be recycled or storage on special landfill.</p> <p>Disposal shall be only those wastes for disposal, which are not acceptable eco-friendly solutions.</p> <p>Liquid waste production and life, polluting the air, can be recycled, cleaning, deodorization.</p> <p>Technology neutralization of industrial and household waste must pass the state ecological expertise”</p> <p><b>Code of Turkmenistan "On Administrative Offences"</b> Art. 141 “Conversion of an undisclosed location in the landfill”</p>
	<i>Incineration</i>	Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste, OJ L 332, 28.12.2000, p. 91–111.	<b>Only the Code of Turkmenistan "On Administrative Offences"</b> Article 139 “Failure to comply with the requirements of the air protection during storage and incineration of industrial and domestic waste”
	<i>Shipment of waste</i>	Regulation (EC) No. 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12.7.2006, p. 1–98.	<b>Rules for protection of coastal waters of Turkmenistan from pollution from ships, approved by the Decree of the President of Turkmenistan (2005)</b> govern the control of discharges of waste from ships at sea
<p><b>Chapter III</b> <b>Institution(s)</b> <b>involved in waste management</b> <b>(focus on pesticides)</b></p>	<p>Institutions involved in waste management:</p> <ul style="list-style-type: none"> <li>• Ministry of Nature Protection</li> <li>• Ministry of Health and Medical Industry, and Sanitary -Epidemiological Service.</li> <li>• Ministry of Agriculture</li> <li>• Ministry of Public Utilities</li> </ul> <p>The Cabinet of Ministers approves the List of hazardous chemicals subject to state control and accounting in Turkmenistan (Article 18). Chemical manufacturers, importers in Turkmenistan and other providers are required to register in the offices of chemical products (Article 27).</p> <p>Service for Land Resources, Ministry of Agriculture allocates land for landfills.</p> <p>Local government authorities make decisions about the location of burial.</p> <p>Ministry of Public Utilities is responsible for collection and disposal of solid waste and garbage.</p> <p>Different industries and organizations are responsible for the waste produced by them.</p> <p>The responsibility for cleaning the old waste was assigned to the State Concern "Turkmenhimiya.</p> <p>Responsible for the demolition of the old accumulated waste, including pesticides</p> <p>The Ministry of Health and Medical Industry is responsible for the implementation of the National Programme for the safe handling of medical waste in hospitals.</p> <p>Web site of the Ministry of Nature Protection: <a href="http://www.natureprotection.gov.tm">www.natureprotection.gov.tm</a>.</p> <p><b>The Law of Turkmenistan "On Chemical Safety" (2011)</b> defines the competence of the Cabinet of Ministers in</p>		

the field of chemical safety. The Cabinet of Ministers shall:

1. determine and approve the list of hazardous chemicals that are not prohibited for use, and the conduct of the state register of hazardous chemicals;
2. approve the procedure for accounting and reporting of chemical products, its distribution in the prescribed manner to the group list of chemicals subject to export controls, approves the deployment of the territory of Turkmenistan companies that perform work and services related to the production, use, processing, destruction, transportation, storage, storage of hazardous chemicals, equipment repair and maintenance, establishes regulations for import, export and transit of hazardous chemicals in Turkmenistan and monitors compliance with them (Articles 6, 18);
3. authorize by the Ministry issued orders to suspend or prohibit the production of chemical products, the use of hazardous chemicals, works with them and other works that do not meet the requirements of chemical safety, take measures to prevent their placement (Article 8);
4. regularly inform employees about the volume and the number of the generation of hazardous chemicals and the degree of poisoning at the workplace (Article 16). According to the Act prohibits the import of Turkmenistan and transit through its territory of hazardous waste for storage and disposal (Article 19).

The law provides for the obligation of enterprises carrying out work with hazardous chemicals. In particular, they are required to carry out systematic production control in the workplace, in rooms in businesses, manufacturing facilities, sanitary protection zones and control zones, as well as waste and garbage hazardous chemicals

### Section III: Analysis of existing national waste management legislation

<b>Theme 1 Scope</b>	
<b>Theme 2 Definitions</b>	<p><b>Definition of hazardous waste</b></p> <p>Law of Turkmenistan "On <b>Protection of Nature</b>" Protection" (2014) first defines the concept of "waste", "waste products", "waste" and "hazardous waste" (Article 1).</p> <p>waste – not suitable for the manufacture of certain products substances (raw materials) to be further disposal or placement of which is extracted useful properties;</p> <p>waste production and consumption – the remnants of raw materials, semi-finished products or other products that are formed in the process of production or consumption, as well as goods (products) that have lost their consumer properties;</p> <p>municipal waste – waste generated as a result of human activity;</p> <p>hazardous wastes – wastes whose existence and (or) treatment that poses a risk to human life, health and the environment;</p> <p>Laws of Turkmenistan:</p> <ol style="list-style-type: none"> <li>1. "On Protection of Nature" (2014)</li> <li>2. "On Radiation Safety" (2009)</li> <li>3. "On the Chemical Safety" (2011),</li> <li>4. "On the Protection of the Ozone Layer" (2009).</li> </ol> <p><b>The Law of Turkmenistan "On Chemical Safety" (2011)</b> provides the first definition of "chemically hazardous waste". Among the basic principles in the field of chemical safety called the ban on the use of hazardous chemicals in order to ensure public safety (Article 4), with a hazardous chemical preservation of the maximum allowable low and achievable levels established by international standards (Article 4), the prohibition of all types of risk associated with work on the generation, handling, storage, collection and transportation of hazardous chemicals (Article 4).</p> <p>In Turkmenistan, there is no single legal act in the field of waste management, including all types of waste. Existing legal acts regulate only certain issues in waste. In the legislation there is no common understanding of all types of waste, including hazardous waste in accordance with the requirements of the Basel Convention on Transboundary Movements of Hazardous Wastes. Hazardous waste includes concepts such as industrial waste, chemical and radioactive waste, ozone-depleting substances. In the statistical material they are referred to as "toxic waste"</p>
<b>Theme 3 Administrative and institutional structure</b>	<p>See Section II: Regulatory framework on waste management, Chapter III Institution(s) involved in waste management (focus on pesticides)</p>
<b>Theme 4 Licensing</b>	<p>In accordance with the Law on licensing of individual activities (2008), the following relevant activities are subject to licensing (Article 20):</p> <ul style="list-style-type: none"> <li>- activities in the field of industrial safety, design and construction of dangerous buildings and transport of dangerous goods,</li> <li>- activities in the field of import, production and sale of chemical products.</li> </ul> <p>In accordance with the Presidential Decree of 23 August 2013 №13180 "On the organization licensed in Turkmenistan" Turkmenhimiya issues permits for the wholesale trade and the importation of pesticides and other agrochemical products</p> <p><b>The Law of Turkmenistan "On Protection of Nature"</b> provides the general requirements for the protection of nature from pollution with industrial, domestic and other wastes (Article 20). The law further defines the</p>



	<p>responsibilities of local authorities in selecting a site for waste disposal in consultation with the Ministry of Nature Protection, Sanitary and Epidemiological Service and other concerned government agencies. Neutralization of hazardous waste at specialized sites, disposal and storage of waste is produced with the permission of the state authorities for the protection of nature (Article 20). The law also defines the areas where the landfill is prohibited. State authorities for the protection of nature and other authorities have the right to restrict, suspend or terminate the activities producing waste if they are not performed in accordance with the requirements of the Act (Article 35).</p> <p><b>The Law of Turkmenistan "On licensing certain types of activities (2009)</b> defines the types of activities subject to licensing. This includes activities for the construction of hazardous installations and transport of dangerous goods (Article 20) and activity in the field of import, production and sale of chemical products (Article 20)</p>
<p><b>Theme 5</b> <b>Transboundary movement, import/export</b></p>	<p>There are no specific rules governing the transportation of dangerous goods. The movement of hazardous waste is logged, registering the name of the waste, its volume/quantity, shipment date and country of origin and destination. Transit of hazardous waste through the territory of Turkmenistan is carried out with the prior written approval of the Government. It shall be notified in writing of any possible cross-border transportation of waste. The notification shall contain information about the origin, composition and quantity of waste, the starting and ending points of their transportation, the date and a description of the transit route of waste through the territory of Turkmenistan. In the event of unforeseen circumstances, the guarantees will cover full compensation for any damage that may be caused to the environment and human health.</p> <p>The law "On Protection of Nature" (2014) prohibits the export hazardous waste (Article 37). The <b>Law "On the Chemical Safety"</b> provides that the transfer of chemical weapons to anyone, directly or indirectly, transit through the territory of Turkmenistan is prohibited (Article 4, part 1). A similar provision is contained in the <b>Constitutional Law of Turkmenistan 'On the Permanent Neutrality'</b> (1995) (Article 6).</p> <p>The law "<b>On the Chemical Safety</b>" defines the requirements for carrying out the work with hazardous chemicals (Article 16). According to the Law on Radiation Safety, it is prohibited to import in Turkmenistan the radioactive waste for storage and disposal (Article 12).</p> <p>In accordance with the Law on Chemical Safety, the import in Turkmenistan and transit through its territory of hazardous chemical wastes for storage and disposal is prohibited (Article 19). According to the Law on Radiation Protection in Turkmenistan import of radioactive waste for storage and disposal of prohibited (Article 12).</p> <p>The law on air protection requires that all chemicals produced in the Turkmenistan and imported from abroad are subject to state registration after the state tests</p>
<p><b>Theme 6</b> <b>Economic Initiatives</b></p>	<p><b>Measures to establish and strengthen national infrastructures and institutions:</b></p> <ul style="list-style-type: none"> <li>a) <b>national registers and databases</b> on safety information for chemicals</li> <li>b) <b>industry's initiatives</b> to promote chemical safety</li> <li>c) promotion of <b>voluntary agreements</b></li> </ul>
<p><b>Theme 7</b> <b>Transport</b></p>	<p>The Law "On Protection of ambient air contains requirements for the protection of ambient air during production, storage, use, transportation and disposal of chemical substances (Art.19 -22), as well as requirements for the protection of the atmosphere on location, recycling, disposal and disposal of industrial and domestic waste (Article 23, 24).</p> <p><b>Sanitary Code of Turkmenistan (2009)</b> provides for the duty to maintain the areas of urban, rural and other communities in accordance with the requirements of sanitary legislation. The procedure and conditions for the collection, use, disposal, transportation, storage and disposal of industrial and domestic waste are set by local authorities in consultation with the relevant authorities of supervision and control in accordance with the requirements of sanitary norms and rules (Article 27).</p> <p>Legal and natural persons are obliged to use the machines, equipment, installations, apparatus and appliances, as well as to production, application (use), transport, storage and disposal of radioactive substances, materials and wastes, which are sources of physical impacts on human health and the presence of epidemiological findings (Article 36).</p>

	<p><b>Regulation of the state environmental review, approved by the President of Turkmenistan (1996)</b> determines the applications that the transportation, handling, and disposal of hazardous industrial waste is subject to environmental review.</p> <p><b>The National Plan for the Prevention and Turkmen oil spill, approved by the President of Turkmenistan (2001)</b> makes provision for the collection, transportation, storage and liquidation of spilled oil</p>
<b>Theme 8 Labelling requirements</b>	No
<b>Theme 9 Packaging and containers</b>	<p><b>According to the Law of Turkmenistan "On Hydrocarbon Resources" (2008)</b> the drilling platform (barge), as well as its vessels serving must be equipped with a water treatment plant and wastewater disinfection and (or) containers for the collection, storage and subsequent transfer of sewage on specialized vessels and (or) the onshore reception facilities. For garbage collection or processing there shall be provided the device (Article 44).</p> <p><b>The Law of Turkmenistan "On Protection of Atmospheric Air" (1996)</b> The law defines the responsibility of local authorities to maintain adequate sanitation in settlements. It also requires containers equipping and their regular maintenance, as well as the abduction of special places for disposal, processing or storage of industrial and household waste (Article 24)</p>
<b>Theme 10 Emergency procedures</b>	While not discussed or decided yet to set up a revolving fund to assist on an interim basis in case of emergency (legal education, the institutional system, operational procedures)
<b>Theme 11 Disposal obligations</b>	<p>Turkmenistan has not yet developed a special law on waste, providing state regulation upon organizing the collection and disposal of waste, including hazardous waste. However, in a number of legal acts there are separate regulations governing waste management.</p> <p><b>Regulation on the state environmental review, approved by the President of Turkmenistan (1996)</b> provides that the transportation, handling, and disposal of hazardous industrial waste is subject to environmental review.</p> <p><b>The Law of Turkmenistan "On Protection of Nature"</b> provides environmental requirements for radioactive and chemical substances. In particular, legal entities and citizens are obliged to comply with environmental requirements for the production, storage, transportation, use, disposal and dumping of radioactive and chemical substances, comply with the established standards of their use, to take measures to prevent and eliminate harmful effects of their application to the natural environment, and also immediately inform the authorities of radiation and chemical safety in excess of the standards (Article 17).</p> <p><b>The Law of Turkmenistan "On Hydrocarbon Resources" (2009)</b> provides that, when carrying out petroleum operations emissions and discharges of pollutants are prohibited without pre-treatment, as well as discharge and disposal on land, at sea and surface waters of all types of waste without the prior permission of the specially authorized state bodies (Article 44). Injection of drilling wastes into the bowels without neutralizing them, is also prohibited. This is allowed in exceptional cases, in agreement with the specially authorized state bodies. According to the Law, drilling platform (barge) and its serving vessels must be equipped with a water treatment plant and wastewater disinfection, and (or) containers for the collection, storage and subsequent transfer of sewage on specialized vessels and (or) the onshore reception facilities. For collection or processing of garbage, devices shall be provided (Article 44)</p>
<b>Theme 12 Incineration</b>	There are no any legal provisions that regulate incineration
<b>Theme 13 Recording,</b>	There is a general provision in Article 21 of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea. It states that the parties agreed to exchange information on a regular basis on

<p><b>monitoring, and reporting</b></p>	<p>the status of the Marine Environment of the Caspian Sea. Last report was presented in 2009</p> <p><b>The report contains:</b></p> <ul style="list-style-type: none"> <li>a) Designated <b>competent authorities and focal points</b></li> <li>b) Information regarding <b>transboundary movements of hazardous wastes</b></li> <li>c) Information on the <b>adopted measures</b></li> <li>d) Information on <b>available qualified statistics</b> on the effects on human health and the environment</li> <li>e) Information concerning <b>bilateral, multilateral and regional agreements</b></li> <li>f) Information on <b>accidents</b> during handling hazardous wastes</li> <li>g) Information on <b>disposal options</b></li> <li>h) Information on <b>measures undertaken for the development of technologies</b> for the reduction and/or elimination of production of hazardous wastes and other wastes</li> </ul>
<p><b>Theme 14 Offences and penalties</b></p>	<p>In accordance with the <b>Criminal Code of Turkmenistan (2010)</b>, there are three articles providing for penalties for pollution management.</p> <p>Article 312. Violation of the rules of transportation, storage, disposal and recycling of hazardous materials and waste;</p> <p>Article 314. Atmospheric pollution;</p> <p>Article 315. Pollution of the marine environment.</p> <p><b>A new Code of Turkmenistan "On Administrative Offences" (2013)</b> comprises nine articles on waste:</p> <p>Article 100. Deterioration of land;</p> <p>Article 109. Violation of the rules of protection of water resources;</p> <p>Article 127. Damage to forests by sewage, chemicals, harmful emissions, waste and garbage;</p> <p>The article is written, "The damage to forests by wastewater, chemicals, industrial and municipal effluents, and waste management, entailing its desiccation or disease – punishable by a fine on individuals of up to three, on officials – up to ten times of the base value (base value is 100 manat or \$35).</p> <p>Article 128. Clogged forests with household discharges and wastes;</p> <p>Article 139. Failure to comply with the air protection rules during storage and incineration of industrial and municipal waste;</p> <p>The article is written Violation of rules during storage, transport, use, or disposal of the neutralization of industrial and other industrial and household waste, as well as failure to comply with requirements for the protection of air from the combustion of these wastes – entails warning or a fine for individuals of up to five, on officials – up to ten times of the base value.</p> <p>Article 141. Conversion of an undisclosed location in the landfill</p> <p>The article is written "Release or disposal of industrial, household and other waste in places that are not installed and is not approved in accordance with the law, – punishable by a fine on individuals in the amount of up to four, on officials – up to ten times of the base value".</p> <p>Article 142. Failure to comply with the requirements of environmental safety;</p> <p>Article 160. Violation of the rules on protection of habitats of aquatic biological resources;</p> <p>Article 349. Violation of the rules on working with explosives, radioactive and other environmentally hazardous substances.</p> <p>The article is written. Violation of the rules of production, storage, disposal, destruction, use, transport explosives, pyrotechnics, radioactive, biological, chemical and other hazardous substances and wastes, or the rules of other workers with them punishable by a fine on individuals in the amount of from two to five, on officials – from five to ten, and on legal entities – from ten to fifteen times the size of the basic unit or administrative suspension of activity of legal persons for up to three months</p> <p><b>Legal and administrative measures for implementation and enforcement, measures to prevent and punish the misconduct</b></p> <p>The Nature Conservation Act provides that the activities of enterprises and organizations may be limited and/or suspended for the violation of environmental regulations on radioactive, chemical, biological substances and micro-organisms if the elimination of the causes or re-profilation is not possible. The same rules apply in case of</p>

	<p>violation of environmental requirements of environmental protection from pollution of industrial and domestic waste (Article 63).</p> <p>In accordance with the Law "On Hydrocarbon Resources" in conducting petroleum operations, the dumping and burial on land, at sea and surface waters of all types of waste without the prior permission of the specially authorized state bodies is prohibited. Injection of drilling wastes into the bowels without prior clearance of their operations is prohibited, unless it is permitted in exceptional cases due to the agreement with the specially authorized state bodies (Article 44).</p> <p>The Law on air protection requires that all chemicals produced in the Turkmenistan and imported from abroad are subject to state registration after the state tests. Chemicals intended for public use, is introduced in Turkmenistan in an amount which can not affect the air quality. The Law prohibit the production, acquisition abroad, storage and use of chemicals that have not been registered and are not included in the list of chemicals that are allowed for use (Art. 19).</p> <p>The Law on Chemical Safety provides that the agency issues orders to suspend or prohibit the production of chemical products, the use of hazardous chemicals that do not meet the requirements; takes measures to prevent their placement (Article 8).</p> <p>In accordance with the Law on licensing of individual activities (2008), the following relevant activities are subject to licensing:</p> <ul style="list-style-type: none"> <li>- activities in the field of industrial safety, design and construction of dangerous buildings and transportation of dangerous goods;</li> <li>- activities in the field of import, production and sale of chemical products (Article 20).</li> </ul> <p>According to the Law "On Ecological Expertise" (2014), Ministry of Environment is responsible for the examination of environmental impact assessment (Art. 11)</p>
<p><b>Theme 15</b> <b>Official controls and inspection</b></p>	<p>Overall coordination and control in the field of hazardous waste is performed by the Cabinet of Ministers of Turkmenistan.</p> <p>As part of the obligations of Turkmenistan under the Convention and the United Nations Environment Programme, the State Commission on compliance established a working group on the implementation of the Basel Convention. In general, the work of the State Commission is led by the Ministry of Nature Protection. Its decisions are binding on all ministries and departments.</p> <p>The control on the collection, accumulation and storage of waste products is performed by the Ministry of Nature Protection and Sanitary -Epidemiological Service of the Ministry of Health and Medical Industry.</p> <p>Ministry of Environmental Protection is responsible for the preparation of environmental impact assessment in relation to transportation, processing and disposal of hazardous industrial waste, as well as the implementation of the Basel Convention.</p> <p>The Department of the Caspian Environmental Control (Caspecocontrol) of the Ministry of Nature Protection performs environmental monitoring and inspection of all activities related to waste management in the port of the Caspian Sea.</p> <p>The Cabinet of Ministers approves the List of hazardous chemicals subject to state control and accounting in Turkmenistan (Article 18). Chemical products' manufacturers, importers in Turkmenistan and other providers are required to register in the offices of chemical products (Article 27)</p>
<p><b>Theme 16</b> <b>Research and development</b></p>	<p>In accordance with Article 20 of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea, the parties agreed to cooperate in the area of research and development of effective methods to prevent, reduce and control pollution of the marine environment of the Caspian Sea, for which the Parties shall endeavor to initiate or intensify, as appropriate, specific research programs, aimed in particular at:</p> <ul style="list-style-type: none"> <li>(a) development of methods to assess the toxicity of hazardous substances and the study of the process of their impact on the ecosystem of the Caspian Sea;</li> <li>(b) the development and application of best available technologies;</li> <li>(c) the phasing out and/or substitution of substances likely to cause pollution;</li> <li>(d) develop environmentally sound and safe methods of disposal of hazardous substances;</li> </ul>

- (e) the development of environmentally sound or safe techniques for water works and regulation;
- (f) assessment of the damage caused by pollution;
- (g) improving the understanding of the hydrological regime and ecosystem dynamics of the Caspian Sea, including the sea level fluctuations and the impact of such fluctuations on the marine and coastal ecosystems;
- (h) to examine the levels of radiation and radioactivity in the Caspian Sea



#### Section IV: Information supplementing legal analyses – from other Experts

##### Topic 1 – Pesticides Manufacturing Industry

*Are there pesticides manufacturers in the country?*

No

*What measures are taken by agrochemicals industries in accordance with the national legislation in regard to hazardous waste, including pesticides waste?*

Not applicable

*Whether individual companies have adopted internal policies to reduce the generation of pesticides waste, and developed programs to enforce these policies?*

Not applicable

*Whether there are any measures taken by industries/waste generators in order to reduce or eliminate pesticides waste generation?*

Not applicable

##### Topic 2 – Management of Obsolete Pesticides Stocks

*Whether there have been carried inventory/storage/disposal activities regarding obsolete stocks? Who carried them out, and what are the results? Provide the list of activities in chronological order.*

There is no official information about inventories, latest unofficial information was obtained during the study, that Turkmenistan has in 2010, has finally removed 11,456.7 tons of toxic waste to central landfills (see introduction, Summary). Therefore, it is expected that these actions only could have been taken place based on previous inventories

##### Topic 3 – Methods used for treatment of pesticides wastes

*What are the methods used for the treatment of pesticides wastes?*

Centralized landfilling has been used in the country.

**The Law of Turkmenistan "On Protection of Atmospheric Air" (1996)** specifies the requirements for placement, treatment and disposal of industrial and domestic waste. Burial, only those wastes that cannot be recycled and should be disposed of in special landfills



## Section V: Disposal, Storage, Recycling and Recovery Facilities – practical information from other Experts

### Topic 1 – Disposal facilities

*Are there any disposal facilities in the country?*

Yes, see Topic 3 in Section IV. In Turkmenistan have been toxic waste (mostly pesticides) has been collected and disposed at central landfills by the State Concern "Turkmenhimiya". However, information on the facilities is not available.

In turn, in 2010, 11,456.7 tons of toxic waste was removed. And measures for the prevention of environmental pollution in the management of hazardous waste provided.

*Are there created permanent facilities for the disposal of pesticides wastes or there are used ad-hoc methods and facilities in this respect?*

Yes. See under previous issues

### Topic 2 – Storage facilities

*Are there any storages of pesticides waste facilities in the country?*

This information we do not have.

*Whether there are any pesticides waste final storage facilities constructed and operated in accordance with the environment standards?*

State Concern "Turkmenhimiya has implemented this work. There is no public information available on this issue.

*Does the legislation establish different rules for storage hazard waste? Please provide the differences.*

No

### Topic 3 – Recycling facilities

*Are there any recycling/re-use facilities in the country?*

No

### Topic 4 – Recovery facilities

*Are there any disposal/destruction facilities for pesticides wastes or recovery facilities (especially for liquid and high concentration toxic)? Please offer examples?*

No

*In case if the country does not have such facilities what are the methods or actions used by the national authorities to fulfil this task? Is there any foreign financial assistance? Are the any mutual/bilateral agreements with international organizations or states that offered its assistance in this respect?*

No

## ANNEXES

**Annex 1: Terms of Reference for IHPA for Coordination of a Disposal Study for Obsolete Pesticides in the Former Soviet Union (only in English)**

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS**  
**Terms of Reference for Consultant/PSA**

<b>Job Title</b>	Coordination and implementation of a Disposal Study for Obsolete Pesticides in the Former Soviet Union		
<b>Division/Department</b>	AGPM		
<b>Programme/Project Number</b>	GCP/RER/040/EC		
<b>Location</b>	Regional		
<b>Expected Start Date of Assignment</b>	1 June 2012	<b>Duration</b>	1 year
<b>Reports to</b>	Kevin Helps	<b>Title:</b>	Coordinator, Senior Officer, Obsolete Pesticides

**GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED**

The EC/FAO project GCP/RER/040/EC looks to develop capacity for management of hazardous wastes through the example of obsolete pesticides and POPs. There is an estimated 200,000 tonnes of these materials known to be affecting the Russian Federation, countries of the Eastern Neighbourhood (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) and the Central Asian Countries [CACs] (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). Much of the previous work on disposal of waste from these countries has looked to export thousands of tones of pesticide stockpiles to high temperature incinerators operated commercially in EC member states. Whilst this strategy meets all international environmental compliance requirements it is prohibitively expensive. The vast distances involved for transport of waste from CACs to facilities in Europe makes the option of finding a local solution appealing based on risk management and cost considerations. Under the project a study of capacity to treat this material is to be commissioned. The Coordinator for the Disposal Study will for the 12 project countries:

1. Review of existing policy framework for the management and elimination (including inventory, assessment, and transport) of POPs and obsolete pesticides in line with the requirements of the respective EU Directives/Stockholm Convention;
2. Conduct benchmarking of current POPs management (including (temporary) storage and destruction) against international best practice on BAT/BEP as set out by the Basel/Stockholm Convention working groups; highlight and describe best ongoing practices per country
3. Review of existing agricultural policy framework on the linkage to fulfillment of environmental obligations such as requirements for the management of contaminated empty containers/packaging
4. Review of existing and planned treatment options for POPs pesticides, obsolete pesticides and related hazardous wastes, contaminated empty containers and contaminated land;



5. Assess potential treatment facilities such as existing modern cement kilns, as well as planned and/or implemented pilot plant investigations, which can develop in the next years to important market players.
6. Assess the Russian-Belarus-Kazakhstan customs Union and its implications for hazardous waste in and through Russia, including an assessment of 1) experiences over the last years practical implementation and of 2) alternative transport routes from the republics avoiding Russian territory. To be completed with due reference to the requirements of the Basel Convention.
7. Assess access (by road, train or water) to treatment options and economics of transport of waste across the region to treatment facilities/alternative storage facilities;
8. Review existing country POPs data (Obsolete Pesticides and PCBs) as far as available, and make efforts to collect, if possible, total hazardous waste stream data as set out in national profiles such as the UNITAR chemicals profile. This will be collated per country in order to assess the potential need for future investment per country/region. Provide estimates of the scale of investments (in terms of tonnes of POPs for disposal) and a rough estimation of their national distribution, tonnes of other obsolete pesticides, distribution and quantities of contaminated land and contaminated containers;
9. Assess status of recycling options for empty containers or already planned or ongoing programs and initiatives;
10. Prepare country summary sheets on findings and identify the gaps in information;
11. Compile report of study findings, including recommendations for filling the information gaps.

The study will be undertaken in countries and through desk research as appropriate and will be implemented with the support of thematic international experts and national experts to be recruited as sub-contractors to the Coordinator of the Disposal Study. The coordinator will prepare draft terms of reference for all consultants within 2 months of the start of the study which will be approved by the Regional Coordinator of project GCP/RER/040/EC at FAO before final recruitment is made. All information collected and assessments conducted will (if possible) be verified by competent national authorities in order to seek ownership and support for further project activities.

The working language is English and some interpretation and document translation is foreseen.

#### KEY PERFORMANCE INDICATORS

##### Expected Outputs:

1. Summary report of existing policy framework for the elimination and management of POPs and obsolete pesticides (12);
2. Analysis of barriers (technical, legal, economic) to the development of national and regional waste management capacity;
3. Report on Opportunities for introduction of new technologies (Thermal and non-thermal) e.g. specific stockpiles (DDT and HCH waste)
4. Summary report of existing and potential Treatment Facilities, pilot plant facilities and empty container recycling facilities/initiatives (12 countries)-
5. Report on POPs waste in relation to total hazardous waste market and approaches for Investment plan for POPs destruction for the region
6. Presentation of the draft report to the SC meeting in September 2013, finalization of the report incorporating eventual comments

##### Required Completion Date:

All by end of June 2013

September 2013

**REQUIRED COMPETENCIES**

## Academic Qualification

1. First degree in chemistry, engineering, environmental science or similar subject area related to chemicals management;
2. Higher degree (PhD) in a waste management related area, chemistry or engineering discipline linked to chemicals management;
3. Research or (university) lecturing experience related to waste and POPs management.

## Technical Competencies and Experience Requirements

1. Minimum 20 years experience in the waste management and soil remediation industry/research sector;
2. Experience in development of risk-based strategies for POPs treatment using a combination of in-situ and ex-situ technologies;
3. Experience in development of POPs remediation plans in developing countries, experience in Asia region desirable;
4. Minimum 10 years experience in development of cost-based budgets for project implementation;
5. Excellent understanding of FAO guidelines and training systems for POPs/pesticide management and contaminated site assessment;
6. Excellent computer skills;
7. Excellent report and proposal writing skills;
8. Fluency in English.