

On approval of the Rules for identification, assessment and accounting of objects of historical pollution, including the maintenance of the state register of objects of historical pollution

#### Unofficial translation

Order of the Acting Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated August 16, 2021 № 329. Registered in the Ministry of Justice of the Republic of Kazakhstan on August 19, 2021 № 24040

Unofficial translation

In accordance with paragraph 2 of Article 143 of the Environmental Code of the Republic of Kazakhstan dated January 2, 2021, **I HEREBY ORDER**:

- 1. To approve the attached Rules for identification, assessment and accounting of objects of historical pollution, including the maintenance of the state register of objects of historical pollution.
- 2. The Department of state policy in waste management, in accordance with the procedure established by law, to ensure:
  - 1) state registration of this order in the Ministry of Justice of the Republic of Kazakhstan;
- 2) placement of this order on the Internet resource of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan after its official publication;
- 3) within ten working days after the state registration of this order, submission of information to the Legal Service Department of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan on the execution of the measures provided for in subparagraphs 1) and 2) of this paragraph.
- 3. To impose control over the execution of this order on the supervising vice minister of ecology, geology and natural resources of the Republic of Kazakhstan.
- 4. This order comes into force from the date of its first official publication and applies to legal relations that arose from July 1, 2021.

Acting Minister of ecology, geology and natural resources of the Republic of Kazakhstan

S. Kozhaniyazov

"AGREED"

Ministry of healthcare of the Republic of Kazakhstan

"AGREED"

Ministry of national economy of the Republic of Kazakhstan

"AGREED"

Ministry of industry and infrastructure development of the Republic of Kazakhstan

"AGREED"

Ministry of emergency situations of the Republic of Kazakhstan

"AGREED"

Ministry of finance of the Republic of Kazakhstan

Appendix to the order of the acting Minister of ecology, geology and natural resources of the Republic of Kazakhstan dated August 16, 2021 № 329

#### The Rules

for identification, assessment and accounting of objects of historical pollution and maintenance of the state register of objects of historical pollution Chapter 1. General provisions

- 1. These Rules for identification, assessment and accounting of objects of historical pollution and maintenance of the state register of objects of historical pollution (hereinafter referred to as the Rules) are developed in accordance with paragraph 2 of Article 143 of the Environmental Code of the Republic of Kazakhstan (hereinafter referred to as the Code) and determine the procedure for identification, assessment and accounting of objects of historical pollution and maintenance of the state register of objects of historical pollution.
  - 2. The following concepts are used in the Rules:
- 1) historical pollution is the accumulated environmental damage caused to waters and (or) lands, which arose as a result of previous activities, including the totality of the impacts of various types of anthropogenic activities, the obligation to eliminate which was not fulfilled or was not fulfilled in full;
- 2) objects of historical pollution are recognized as territories and water areas or their separate sections, where historical pollution has been identified, as well as ownerless capital construction facilities and storage or disposal of waste, which are a source of historical pollution;
- 3) the state register of objects of historical pollution is an electronic data bank, which collects information about the identified objects of historical pollution, including information on the results of the assessment of objects of historical pollution;

4) environmental sensitivity of an object is a parameter for assessing environmental objects that characterizes their ecological value, as well as their sensitivity index, taking into account seasonality, in order to determine the priority of protection and cleaning in case of pollution.

Other concepts and definitions used in these Rules are applied in accordance with the environmental legislation of the Republic of Kazakhstan.

### Chapter 2. Procedure for identification of objects of historical pollution

3. In accordance with paragraph 3 of Article 143 of the Code, the identification and assessment of objects of historical pollution are organized by local executive bodies of districts, cities. By decision of the Government of the Republic of Kazakhstan, the authorized body in the field of environmental protection organizes the identification and assessment of individual objects of historical pollution.

To carry out work on the identification and assessment of objects of historical pollution, the authorized body in the field of environmental protection, local executive bodies of districts, cities involve organizations that have a license to perform work and provide services in the field of environmental protection in accordance with the legislation of the Republic of Kazakhstan on public procurement.

4. For the inventory of objects of historical pollution, the following criteria are used: the object of historical pollution does not have an owner (ownerless object); the object of historical pollution is in state, communal property;

the object of historical pollution is located on the territory (or adjacent territory) of the operating business entity, but the specific culprit of historical pollution (legal or individual entity) cannot be identified or cannot be held liable due to the limitation period of five years of causing pollution.

- 5. The types of objects of historical pollution include the following:
- 1) territories and water areas or their individual sections where historical pollution has been identified;
  - 2) ownerless capital construction projects;
- 3) territories disturbed as a result of economic activities of mining, mining and processing industries;
  - 4) territories contaminated with oil products;
  - 5) objects of historical pollution of the manufacturing industry;
  - 6) places of storage (warehousing), disposal of obsolete pesticides, fertilizers;
- 7) residential areas contaminated with heavy metals, oil products, persistent organic pollutants (POPs), radioactive substances and other pollutants;
- 8) ownerless places of storage or disposal of production and consumption waste ( abandoned landfills, landfills, ash dumps, sludge collectors, etc.).

- 6. Identification of contaminated and potentially contaminated objects of historical pollution is divided into the following stages:
- 1) collection and documentation (including interpretation of space images) of historical and up-to-date information on activities at contaminated and potentially contaminated sites;
- 2) analysis and documentation of the results of previous studies of existing pollution and the impact of pollution on the environment;
- 3) analysis and documentation of environmental, geographical and geological information characterizing the sensitivity of the territory to pollution;
- 4) development of a list of contaminated and potentially contaminated objects of historical pollution.
- 7. Information about objects of historical pollution and potentially polluted places is direct or indirect.
- 8. Direct information about contaminated and potentially contaminated objects of historical pollution are obtained from the following sources:
- 1) statistical and departmental reports, reports and materials of territorial divisions in the field of environmental protection, materials available at the disposal of local executive bodies of districts, cities, research and materials carried out by scientific institutes, as well as other institutions;
  - 2) maps and satellite images;
  - 3) building permit, building design documentation;
- 4) decisions of local executive bodies of districts, cities, documents of territorial development planning;
  - 5) materials of conducted surveys of territories and water areas;
  - 6) materials obtained during the site visit.
- 9. Indirect information about contaminated and potentially contaminated objects of historical pollution is obtained from publications, as well as appeals from the population, the public through the Internet portal and social networks. The reliability of information obtained about the object of historical pollution by an indirect method is checked by the authorized body in the field of environmental protection and local executive bodies of districts, cities.
- 10. The analysis of direct information on economic activity and environmental sensitivity parameters takes into account the sector of the economy, as well as production processes, including the storage, trade and handling of chemicals and chemical products, which causes pollution through the production of a certain amount of products, production technology, enterprise capacity, contamination of ground, soil or groundwater.
- 11. The method of research and evaluation of maps is based on the identification of various objects that may be associated with environmental pollution. By comparing and studying maps of three years, the dynamics of the area of objects and the period of operation are determined. Thematic maps (including geological maps) are used to describe the environmental conditions at a contaminated or potentially contaminated site.

- 12. The method for evaluating satellite images is based on the interpretation of satellite images and the study of a stereo model (spatial image of the area). A three-dimensional image is obtained by viewing space photographs with a stereoscope. Satellite photographs of different years are used to assess the dynamics of the development of an object of historical pollution.
- 13. When identifying contaminated and potentially contaminated historical objects, available maps at a scale of 1:25000 or more should be used.
  - 14. The objects found on the maps are divided into the following groups:
- 1) historical objects related to the contaminated area (including former factories, test sites, stations, warehouses, etc.);
- 2) objects that can contribute to the spread of pollution (including landfills, quarries, sludge ponds, ash dumps, etc.).
- 15. The purpose of visiting an object of historical pollution is to determine the correctness of determining the location of the object, visual assessment of the object, as well as collecting additional information.
- 16. When conducting a survey of residents or employees of the object, additional information is collected about objects for which indirect information has already been collected in accordance with paragraph 9 of these Rules, and information about objects for which there is no indirect information.
- 17. Local executive bodies of districts, cities collect the information received on a potentially contaminated historical object, fill out the form in accordance with Appendix 1, which includes general information about the object, potential pollution and environmental sensitivity.
  - 18. During the examination, the following information is obtained:
  - 1) location of historical pollution (city, region, district);
- 2) the boundaries of the object of historical pollution, their changes during the operation of the object;
  - 3) the technology used, the capacity of the enterprise;
  - 4) a list of manufactured products and waste stored at the object;
  - 5) the date of the actual commissioning of the object and the closing of the object;
  - 6) whether the boundaries of the impact of the object of historical pollution have changed;
- 7) a list of complaints, comments, notifications of residents about the operation of the object of historical pollution and what has been done to prevent negative impacts;
  - 8) a list and description of accidents that occurred at the object of historical pollution;
  - 9) quality of water, soil;
- 10) whether signs of contamination are observed at the object of historical pollution smell, smoke, chemical leakage or hazardous waste disposal.

## Chapter 3. Procedure for assessment of objects of historical pollution

- 19. When assessing the hazard of potentially contaminated historic objects, the following should be taken into account:
- 1) parameters characterizing the danger of the object, the operation of which has created a potentially contaminated site (including information on the chemicals and chemical products used, waste, the duration of the operation of the object, emissions of pollutants, the purpose of using the real estate);
- 2) environmental sensitivity parameters of a potentially contaminated historical object (including environmental, geological and hydrogeological conditions of the site, the location of watercourses and water bodies, the proximity of specially protected natural areas, residential areas, etc.).
  - 20. Assessment of the object of historical pollution includes the establishment of:
  - 1) volume or mass of pollutants, wastes by their types;
- 2) areas of territories and water areas or their sections, on which the object of historical pollution is located, categories and types of lands and waters allowed for use;
- 3) the level and scope of the negative impact on the environment, including the ability of pollutants to migrate to other components of the natural environment, the possibility of pollution of water bodies, including those that are sources of drinking and domestic water supply, the possibility of new environmental damage and harm to life, and (or) human health;
- 4) the presence of hazardous substances at the object of historical pollution specified in international treaties to which the Republic of Kazakhstan is a party;
- 5) the number of people living in the territory, the environment of which is negatively affected by the object of historical pollution;
- 6) the number of people living in the territory, the environment of which is under the threat of negative impact from the object of accumulated environmental damage.
- 21. The collected information on potentially contaminated historical objects is evaluated in accordance with Appendix 2 to these Rules.
- 22. Objects of historical pollution are subdivided into categories to determine the priority objects in respect of which the elimination of historical pollution, as well as the adoption of other urgent measures, must be carried out as a matter of priority, and the sequence of liquidation works in relation to other objects of historical pollution, included in the state register of objects of historical pollution in accordance with Appendix 2 to these Rules.
- 23. Local executive bodies of districts, cities, within fifteen working days, submit the results of the identification and assessment of potentially contaminated historical objects to the authorized body in the field of environmental protection in order to be included in the state register of objects of historical pollution.
- Chapter 4. Procedure for accounting of objects of historical pollution and maintenance of the state register of objects of historical pollution
- 24. Accounting of objects of historical pollution is carried out by including them in the state register of objects of historical pollution within a period not exceeding thirty working

days from the date of receipt by the authorized body in the field of environmental protection from local executive bodies of districts, cities.

25. The State register of objects of historical pollution is an electronic data bank that collects information about identified objects of historical pollution, including information on the results of the assessment of objects of historical pollution in accordance with paragraphs 9, 16 and 21 of the Rules, as well as their origin, property ownership of objects of historical pollution and the necessary work to eliminate historical pollution.

The maintenance of the state register of objects of historical pollution is organized by the authorized body in the field of environmental protection at the expense of budgetary funds on the basis of materials for identifying and assessing the objects. Maintenance of the state register of objects of historical pollution includes:

- 1) consideration of materials for identification and assessment of objects of historical pollution;
- 2) making a decision on inclusion or refusal to include in the state register of objects of historical pollution;
  - 3) categorization of objects of historical pollution;
  - 4) updating information about the object of historical pollution;
  - 5) exclusion from the state register of objects of historical pollution.
- 26. The state register of objects of historical pollution is placed in the public domain on the Internet resource of the authorized body in the field of environmental protection.

The inclusion of an object in the state register of objects of historical pollution involves the following actions:

- 1) submission of an application for inclusion of an object in the state register. This document is submitted by the applicant (local executive body of the district, city) in writing to the authorized body in the field of environmental protection. The application states:
  - a) the name of the object (if any);
  - b) its actual location;
  - c) information about the ownership of the object.

The application is accompanied by materials of identifying and assessing the object, containing, among other things, basic information about it.

2) Making a decision to include (not include) an object in the State register of objects of historical pollution.

Based on the results of consideration of the materials submitted by the applicant, the authorized body in the field of environmental protection, within a period not exceeding 30 working days from the date of receipt of the application, makes a decision on the inclusion of the object in the State register of objects of historical pollution or refusal to be included in the state register, indicating the reasons. The basis for refusal is the provision of false information and (or) materials, as well as the failure to provide the necessary information.

3) Categorization of the object of historical pollution.

This procedure is carried out by the authorized body in the field of environmental protection to justify the order of work on the liquidation of objects of historical pollution and the adoption of urgent measures. The criteria for allocation of priority objects for liquidation of objects of historical pollution and the timing of categorization are established by the authorized body in the field of environmental protection.

4) Making changes to the state register of objects of historical pollution when updating information about the object.

Amendments are made to the state register of objects of historical pollution in cases of changes in the information contained in the application and (or) in the materials.

The applicant sends updated information about the object of historical pollution to the authorized body in the field of environmental protection, and the latter, within a period not exceeding 30 working days from the date of its receipt from the applicant, decides to update the information about the object and makes appropriate changes to the State register of objects of historical pollution.

The exclusion of an object from the state register of objects of historical pollution is carried out on the basis of the certificate of acceptance of work performed, submitted by the applicant, confirming the liquidation of historical pollution at the object. The decision is made by the authorized body in the field of environmental protection within a period not exceeding 30 working days from the date of submission of the said act. The application, information about the object and the act of acceptance of the work performed, confirming the liquidation of objects of historical pollution at the object, are sent by the applicant to the authorized body by mail with a list of attachments and a notification of receipt.

Categorization of objects of historical pollution is carried out in relation to objects included in the state register of objects of historical pollution. To do this, their impact on the state of environmental safety is compared in order to justify the order of work on the liquidation of objects of historical pollution and the adoption of urgent measures. Based on the results of the categorization of objects of historical pollution, objects are identified that are subject to liquidation as a matter of priority.

The form of the state register of objects of historical pollution is maintained in accordance with Appendix 3 of these Rules.

- 27. The authorized body in the field of environmental protection forms a text and graphic database of objects of historical pollution in the state register of objects of historical pollution.
- 28. The state register of objects of historical pollution is placed in the public domain on the Internet resource of the authorized body in the field of environmental protection.

Appendix 1
to the Rules of identification, assessment
and accounting of objects of historical
pollution and maintenance of the state
register
of objects of historical pollution

## Results of identification of potentially contaminated objects

Table 1 General information about the object of historical pollution

Name of the polluted site							Registratio n number	
Nomenclat ure of orthophoto maps			Nº		Name of the source o f information	Year		
Coordinate s:								
latitude	*	I	II					
longitude	*	I	II	Notes on so	urces of infor	mation		
Address region:								
area								
city								
district of the city,								
street, №								
Total active time period of contaminat ion				*		Category of the contaminat ed or potentially contaminat ed area of the object		*
Detailed description of the object								
Nearest pon	d, lake n	1		*	Nearest rive	r, stream	m	*
Geological s	Geological situation					*	Groundwat ers m	*
Nearest well m					*	Nearest building m	*	
Location of	objects in an	ecologically	sensitive are	ea (school, k	indergarten, į	gardens, hosp	oital)	*
Assignment	of the use of	f the territory	of the objec	t location in a	accordance w	rith the territo	orial plan	*
Purpose of t	he object							*
Land owner	(building) _							*
Cadastral nu	imber of the	land plot				-		

Date	The forn	The form filled out by								
*	Informat	Information source number according to the information source list								
Ta	ble 2. Ard	chive	evaluation							
№		e, own e object	Area m?	Indus	try	Code	,	Tim	e	№ of the information source
Ta	ble 3. Pol	lutan	ts							
№			Substance name	;	Product	ion or u	ised, t/yea	r	Total on	the territory, t
Ta	ble 4. Inf	ormat	ion about tl	ne conta	aminate	d are	a			
No			Contaminated to	erritory	Area, m	12			Depth of	f pollution, m
No		Pollut		Quantity		Det	ection me	thoo	1	ultiplicity of MC ceedance
Ta №	ıble 6. Gro	Pollut	vater pollut	ion Quantity	in mo/l	Det	ection me	41	, Mı	ultiplicity of MC
				<b>Q</b>				เทด	1	
								tnoc	exc	ceedance
Ta	ble 7. Soi	l poll	ution					unoc	exc	
	ble 7. Soi	l poll		Quantity	in mg/kg	Det	ection me		exo	
№		Pollut					ection me		exo	ceedance ultiplicity of MC

Appendix 2
to the Rules of identification, assessment
and accounting of objects of historical
pollution and maintenance of the state
register
of objects of historical pollution

# Assessment of the results of identifying potentially contaminated objects and categorization of objects of historical pollution

Table 1. Duration of the period of polluting activity (maximum 10 points)

№	Object validity period, years	Number of points
1.	<10	3
2.	10-30	6
3.	30-50	8
4.	>50	10
5.	Unknown	10*

Table 2. Area (maximum - 5 points)

No	Area, m2	Number of points
1.	<2500	2
2.	2500-5000	3
3.	5000-10000	4
4.	>10000	5
5.	Unknown	10*

Table 3. Degree of hazard of substance and wastes used, stored and generated at the object (maximum - 5 points)

No	Hazard classification of substances * and wastes **	Number of points
1.	Substances used and stored on site are not hazardous	2
2.	Substances used and stored on site are hazardous	5
3.	Waste used and stored on site is not hazardous	2
4.	Waste used and stored on site is hazardous	5

<sup>\*</sup> The hazard of substances is determined in accordance with the classification of chemical products

EAEU TR No. 41 On the safety of chemical products

\*\* The danger of waste is determined in accordance with the Order of the Minister of Ecology,

Geology and Natural Resources of the Republic of Kazakhstan dated "\_\_" \_\_\_\_ 202\_\_ No

Table 4. Storage of substances and wastes on the territory of the subject (maximum - 10 points)

	Storage of hazardous chemicals, chemical products and waste on the territory, tons	Number of points
1.	Storage >10 000	10
2.	Storage ≤ 10 000	5
3.	Not stored on the territory	0
4.	Unknown	10*

Table 5. Surveys and interviews on site (maximum 20 points)

№	Observations and information	Number of points
	There are structures or technical structures on the site that can contribute to the spread of pollution (	
1.		3

<sup>&</sup>quot;On approval of the waste classifier".

	for example, drainage channels, wells, equipment placed horizontally in the ground)	
2.	There is no solid (asphalt, concrete) surface on the site or it is badly damaged	3
3.	At the site, visual pollution is observed in water bodies, watercourses, or near them	5
4.	Soil contamination is visually observed on the site	5
5.	Site equipment damaged (e.g. containers for storing waste or chemicals, process equipment outdated and damaged)	5
6.	There is a specific smell	5
7.	Effects of pollution on vegetation is observed	5
8.	Information about health problems of the population at this site	5
9.	Other significant observations not mentioned above	5

Table 6. Hazard assessment at the site \*\*\*

№	Sum of points	Explanation
1.	Up to 30	Object is not hazardous
2.	More than 30	Object is hazardous

\*\*\* The hazard assessment of an object is obtained by summing up the points as described in accordance with tables 1, 2, 3, 4 and 5 of this Appendix. If the object is not recognized as hazardous in accordance with Table 6 of this Appendix, the site is not potentially contaminated and no further calculations are made. If the object is considered hazardous in accordance with Table 6 of this Appendix, then it is necessary to assess the sensitivity of the environment in accordance with Tables 7, 8, 9, 10, 11 and 12 of this Appendix.

Table 7. Use of the territory of the object location in accordance with the territorial plan of the local executive body (maximum - 10 points)

No	Site characteristics	Number of points
1.	Residential area	10
5.	Sports and recreation complexes, public buildings	10
2.	Agricultural lands	8
4.	Green zone, natural areas and green spaces	7
3.	Zones of industrial production and warehouses, zones of ports and transport routes	6

Table 8. Use of the territory located in close proximity to the contaminated site, according to the territorial planning of the local executive body (maximum - 15 points)

	-	-
No	Objects located within a radius of 500 m from a contaminated or potentially contaminated site	Number of points
1.	Kindergarten, playground or school, hospital	3
2.	Residential area	3
3.	Agriculture or farmland	4
4.	Sports and recreation complexes	3
5.	Protected area	4
6.	Drinking and (or) utility water supply	15
7.	None of the above objects	0

Table 9. Type of soil (maximum 10 points)

№	Type of soil	Number of points
1.	Clay	2
2.	Gravel	10
3.	Sand	9
4.	Peat	4
5.	Loam	6
6.	Clay sand	7
7.	Unknown	10*

Table 10. Groundwater level (maximum 5 points)

№	Groundwater level	Number of points
1.	<1 m	5
2.	1-5 m	4
3.	5-10 m	3
4.	>10 m	2
5.	Unknown	10*

Table 11. Distance of contaminated sites from surface water objects (maximum 10 points)

Nº	Distance from surface water objects to contaminated sites	Number of points
1.	Such objects are located on the territory of the contaminated site.	10
2.	Such objects are located at a distance of up to 100 m.	8
3.	Such objects are located at a distance of 100 - 300 m	6
4.	Such objects are located at a distance of 300-500 m	4

J.	Such objects are located at a distance of more than 500 m.	2	
6.	No surface water nearby	0	

Table 12. Assessment of environmental sensitivity of the environment

№	Sum of points	Explanation			
1.	Up to 20	Low environmental sensitivity of the environment - the area is protected ( or stable) from pollution			
2.	20-30	Average environmental sensitivity of the environment - the territory is partially protected from pollution, under appropriate conditions, the spread of pollution of the soil cover, groundwater and surface water is possible.			
3.	More than 30	High environmental sensitivity of the environment - territory is not protected			

Table 13. General assessment of objects of historical pollution \*\*\*\*

№	Sum of points	Explanation
1.	More than 50	Category 1 - higher priority objects
2.	40-50	Category 2 - priority objects
3.	Up to 40	Category 3 - less priority

\*\*\*\* The general assessment of potentially contaminated objects is obtained by summing the points in accordance with tables 6 and 12 of this Appendix.

Appendix 3 to the Rules of identification, assessment and accounting of objects of historical pollution and maintenance of the state register

of objects of historical pollution

Form of the state register of objects of historical pollution

No	Name and location of the object of historic al pollutio n	Branch o f econom i c activity	The owner of the object of historic a l pollutio n	Openin g hours of the object of historic a l pollutio n	Borders and area of the object o f historic a l pollutio n	object o f historic	Purpose of using the property (if any)	Cadastr a l designat ion of a land plot	Nearby objects at risk	object o f historic a l	MCL of pollutan ts
	1		n	n	n	11				a l pollutio n	
1	2	3	4	5	6	7	8	9	10	11	12

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