平成21年度地下水の水質測定結果について

(1) 内容

水質汚濁防止法第15条に基づき、地下水の水質の状況を把握するため、国、岡山市 及び倉敷市と協力して、県下の35地点で概況測定を行うとともに、過去に汚染が確認 された9地点で定期モニタリング測定を実施した。

(7) 対象項目

地下水の水質汚濁に係る環境基準が定められている環境基準項目(26項目)と要監 視項目(27項目)

(4) 測定方法

① 概況測定

環境基準項目及び要監視項目 年1回測定

② 定期モニタリング測定 環境基準項目 年1~2回測定

測定地点の内訳

区分	県	国	岡山市	倉敷市	計
概況測定	19	4	6	6	35
定期モニタリング測定	1	1	3	4	9

(2) 結果

(ア) 概況測定

35地点のうち6地点で環境基準を超過した。周辺調査の結果、超過した4項目の うち、鉛、ひ素及び硝酸性窒素・亜硝酸性窒素は、自然由来や施肥の影響と推定され た。ふっ素については現在調査中である。

また、要監視項目は2地点で測定を行ったが、いずれの項目も検出されなかった。

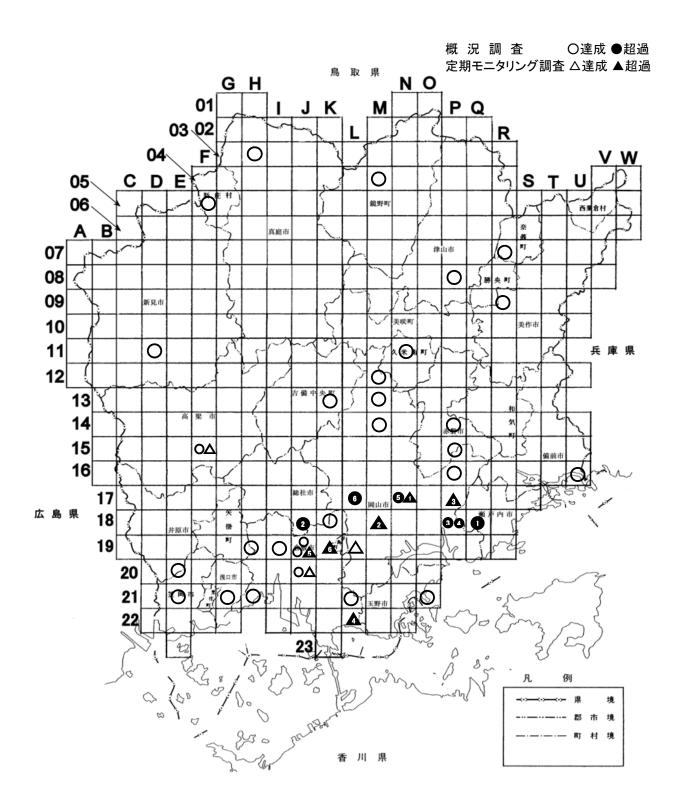
(イ) 定期モニタリング測定

以前に汚染が確認され、周辺調査が終了している<u>9地点のうち6地点で環境基準を超過し、汚染の継続が確認された。</u>汚染原因としては、これまでと同様にそれぞれ、 事業場由来、自然由来、生活排水由来と検証されている。

(3) 今後の対応

引き続き地下水の水質の測定を行い、実態の把握に努める。

平成21年度地下水の水質測定結果



地下水環境基準達成状況図

概況調査の測定結果 (単位:mg/l)

1276	ル inj <u>且 V / パ</u>														\ - -	Σ.IIIg/I/														
							環				境				基			準				項				目				
番号	調査地点	用途	測定機関	カドミウム	全シアン	鉛	六 価 ク ロ ム	ひ 素	総水銀	アルキル水銀	P C B	ジクロロメタン	四塩化炭素	1・2-ジクロロエタン	1 .1―ジクロロエチレン	シス―1.2―ジクロロエチレン	1 . 1 . 1 — トリクロロエタン	1 .1 .2―トリクロロエタン	トリクロロエチレン	テトラクロロエチレン	1 .3―ジクロロプロペン	チウラム	シマジン	チオベンカルブ	ベンゼン	セレン	硝酸性窒素及び亜硝酸性窒素	ふった素	ほう 素	要監視項目
				0.01	N.D.	0.01	0.05	0.01	0.0005	N.D.	N.D.	0.02	0.002	0.004	0.02	0.04	1	0.006	0.03	0.01	0.002	0.006	0.003	0.02	0.01	0.01	10	0.8	1	
1	玉野市沼	一般飲用	岡山県	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5.2	0.24	0.33	
2	瀬戸内市邑久町上山田	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	25	N.D.	0.07	検出なし
3	備前市日生町寒河	その他	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	6.5	0.4	0.04	検出なし
4	赤磐市東軽部	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
5	吉備中央町上加茂	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.83	0.54	N.D.	
6	総社市宿	生活用水	"	N.D.	N.D.	N.D.	N.D.	0.018	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.7	N.D.	
7	笠岡市金浦	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	8.1	0.09	0.05	
8	井原市門田町	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.2	0.09	N.D.	
9	浅口市鴨方町六条院西	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.0	0.25	N.D.	
10	高梁市成羽町下日名	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.5	N.D.	N.D.	
11	新見市哲多町本郷	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	3.7	N.D.	N.D.	
12	矢掛町横谷	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.09	0.22	N.D.	
13	津山市近長	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.71	N.D.	N.D.	
14	真庭市蒜山上福田	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.72	N.D.	N.D.	
15	美作市栄町	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
16	鏡野町奥津	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.98	N.D.	N.D.	
17	久米南町南庄	その他	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.3	80.0	N.D.	
18	新庄村	一般飲用	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.46	N.D.	N.D.	
19	奈義町広岡	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.3	N.D.	N.D.	
					•										•									-			-	-		

0

2

⁽注)地下水環境基準値を測定項目下欄に示す。 N.D.は不検出であることを示す。 環境基準値または指針値を超えている検体値は太字(太枠)で示す。

概況調査の測定結果 (単位:mg/l)

兄調査の測定結果	:																											(単1)	⊈:mg/1)	
						環				境				基			準				項				目					
調査地点	用途	測定機関	カドミウム	全 シ ア ン	鉛	六 価 ク ロ ム	ひ 素	総水銀	アルキル水銀	P C B	ジクロロメタン	四塩化炭素	1・2ージクロロエタン	1・1―ジクロロエチレン	シス―1・2―ジクロロエチレン	1・1・1―トリクロロエタン	1・1・2―トリクロロエタン	トリクロロエチレン	テトラクロロエチレン	1・3―ジクロロプロペン	チウラム	シマジン	チオベンカルブ	ベンゼン	セレン	硝酸性窒素及び亜硝酸性窒素	ふっ素	ほ う 素	要監視項目	
			0.01	N.D.	0.01	0.05	0.01	0.0005	N.D.	N.D.	0.02	0.002	0.004	0.02	0.04	1	0.006	0.03	0.01	0.002	0.006	0.003	0.02	0.01	0.01	10	0.8	1		_
岡山市東区金岡東町	その他	国交省	N.D.	N.D.	0.034	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.001	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.66				•
岡山市東区金岡東町	その他	"	N.D.	N.D.	0.039	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.001	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.47				
岡山市中区藤原西町	その他	"	N.D.	N.D.	0.012	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.03	0.18	N.D.		
倉敷市安江	その他	"	N.D.	N.D.	N.D.	N.D.	0.006	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.9	0.15	0.03		
岡山市北区建部町川口	生活用水	岡山市	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	6.2	0.10	N.D.		
岡山市北区建部町中田	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	3.4	0.20	N.D.		
岡山市北区御津下田	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1.0	0.14	N.D.		
岡山市北区今岡	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	12	1.4	0.09		6
岡山市東区瀬戸町塩納	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	5.5	0.15	N.D.		
岡山市東区瀬戸町光明谷	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.57	0.35	0.03		
倉敷市安江	生活用水	倉敷市	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.0010	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	2.4	0.08	N.D.		
倉敷市生坂	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	4.1	0.21	N.D.		
倉敷市木見	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	8.0	0.10	N.D.		
倉敷市玉島柏島	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	7.8	0.19	0.09		
倉敷市連島町連島	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	3.2	N.D.	N.D.		
倉敷市船穂町船穂	生活用水	"	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.06	0.10	N.D.		
	間直地点 岡山市東区金岡東町 岡山市東区金岡東町 岡山市東区金岡東町 岡山市中区藤原西町 倉敷市安江 岡山市北区建部町中田 岡山市北区今岡 岡山市北区今岡 岡山市東区瀬戸町塩納 岡山市東区瀬戸町光明谷 倉敷市安江 倉敷市生坂 倉敷市工島柏島 倉敷市連島町連島	調査地点 用途 同山市東区金岡東町	関山市東区金岡東町 その他 国交省 の の の で で で で で で で で で で で で で で で で	用途 開途 別定 機関 方 方 方 方 日本 機関 三 方 分 日本 日本 日本 日本 日本 日本 日本	田逸	田漁	田山市東区金岡東町 その他 『 ND.	田舎	田舎	田漁	田舎	日本語画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画	日本学院 日本学院 日本学院 日本学院 日本学院 日本学院 日本学院 日本学院	日本学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学	日本学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学学	日本語画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画	日本語画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画	日本語画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画画	日本	日本語 は は は は は は は は は は は は は は は は は は は	日本語 は は は は は は は は は は は は は は は は は は は	接法性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性	接換性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性性	日本語 は は は は は は は は は は は は は は は は は は は	Harmatical	Retained Re	Rigida Ligania Ligani	Registration of the control of the	Registration of the content of the	Registration of the properties and the state of the properties of

(注)地下水環境基準値を測定項目下欄に示す。 N.D.は不検出であることを示す。 環境基準値または指針値を超えている検体値は太字(太枠)で示す。

~	切 エーノリンノ 訓旨	L 47 ///.	<u>~~~~</u>																										٠, ١	- [虹 . IIIg/ I/
							環				境				基			準				項				目				
番号	調査地点	用途	測定機関	カドミウ	全シア	鉛	六価クロ	ひ 素	総水	アルキル水	P C	ジクロロメ	四塩化炭	1・2ージクロロ	1・1―ジクロロエチ	シスー1・2―ジクロロコ	1・1・1―トリクロロ	1・1・2ートリクロロ	トリクロロエチ	テトラクロロエエ	1・3―ジクロロプロ	チウラ	シマジ	チオベンカ	ベンゼ	セレ	硝酸性窒素及び亜硝酸性	<u>ئ</u> د	ほう	要監視項目
				٨	ン		٨		銀	銀	В	タン	素	エタン	レン	エチレン	エタン	エタン	レン	チレン	ペン	٨	۸	ガ	ン	ン	性窒素	素	素	
				0.01	N.D.	0.01	0.05	0.01	0.0005	N.D.	N.D.	0.02	0.002	0.004	0.02	0.04	1	0.006	0.03	0.01	0.002	0.006	0.003	0.02	0.01	0.01	10	0.8	1	
1	高梁市成羽町成羽	生活用水	岡山県									N.D.	N.D.	N.D.	N.D.	0.011	N.D.	N.D.	0.006	N.D.	N.D.				N.D.					
·	间米市级市門级市	エルババ	四田水									N.D.	N.D.	N.D.	N.D.	0.006	N.D.	N.D.	0.003	N.D.	N.D.				N.D.					
2	岡山市中区藤原西町	その他	国交省	N.D.	N.D.	0.024	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.13	N.D.	
3	岡山市北区野田	工業用水	岡山市					0.032																						
4	岡山市東区西隆寺	生活用水	"																								21			
5	岡山市南区箕島	生活用水	"																								8.0			
6	倉敷市児島唐琴	生活用水	倉敷市									N.D.	N.D.	N.D.	N.D.	0.010	N.D.	N.D.	0.0070	0.15	N.D.				N.D.					
7	倉敷市沖	生活用水	"									N.D.	N.D.	N.D.	N.D.	0.013	N.D.	N.D.	0.0080	0.039	N.D.				N.D.					
8	倉敷市中帯江	生活用水	"					0.006																				1.8		
9	倉敷市中島	生活用水	"									N.D.	N.D.	N.D.	N.D.	0.007	N.D.	N.D.	0.0060	0.0058	N.D.				N.D.					





(単位:mg/l)

(参考) 地下水測定項目について

環境基準項目

環境基準で定めている人の健康の保護に係る項目

カドミウム、全シアン、鉛、六価クロム、砒素、総水銀、アルキル水銀、ポリ塩化ビフェニル、ジクロロメタン、四塩化炭素、1,2ージクロロエタン、1,1ージクロロエチレン、シスー1,2ージクロロエチレン、1,1,1ートリクロロエタン、1,1,2ートリクロロエタン、トリクロロエチレン、テトラクロロエチレン、1,3ージクロロプロペン、チウラム、シマジン、チオベンカルブ、ベンゼン、セレン、硝酸性窒素及び亜硝酸性窒素、ふっ素、ほう素(以上26項目)

要監視項目

人の健康の保護に関連する物質ではあるが、現時点では直ちに環境基準項目とせず引き続き知見の集積に努めるべき項目

クロロホルム、トランスー1,2ージクロロエチレン、1,2ージクロロプロパン、pージクロロベンゼン、イソキサチオン、ダイアジノン、フェニトロチオン、イソプロチオラン、オキシン銅、クロロタロニル、プロピザミド、EPN、ジクロルボス、フェノブカルブ、イプロベンホス、クロルニトロフェン、トルエン、キシレン、フタル酸ジエチルへキシル、ニッケル、モリブデン、アンチモン、塩化ビニルモノマー、エピクロロヒドリン、1・4ージオキサン、全マンガン及びウラン (以上27項目)