Ministerial Decision

No. (192/2000)

A' Dhahirah Region Water Supply Wellfield Protection Zones

- Pursuant to the Law for Conservation of the Environment and Prevention of Pollution issued by Royal Decree No. (10/82)
- And the Law for Protection of Water Resources issued by Royal Decree No. (29/2000)
- And the Royal Decree No. (47/2001) for Ministerial Amendments
- And to the General Public best of interest,

DECIDED

Article 1: Determining Dhahira Region Water Supply Wellfield Protection Zones in Ad Dhahirah Region in the wilayat of Al buraimi, Mahdah (Wadi Safwan and Wadi Mahdah) Abri and Dhank (AI Masarrat Basin) in Ad Dhahirah Region as per the attached maps in Appendix 1, to develop the water resources as well as protecting water resources and public water supply wellfields against pollution, exhaustion and intrusion of saline water.

Each Region is to be divided into three areas each determined according to the co-ordinates given in Appendix 2.

- Article 2: Determines the extent of permission to practice activities and works in the protected Regions mentioned in Article 1 and in accordance with Appendix 3. These activities and works should be carried out in accordance with the Regulations and as given in Appendix 4.
- Article 3: The Ministry of Regional Municipalities, Environment and Water Resources is to manage Ad Dhahirah Region water supply wellfields in coordination with all concerned parties in order to achieve the requirements given in Article 1.
- Article 4: The Minister of Regional Municipalities, Environment and Water Resources shall issue Decisions to form a Working Committee to carry out the necessary work to achieve the aims of determination in the protected areas mentioned in Article 1.

This committee is to co-ordinate with all government parties and take all necessary action to remove any obstacles which may affect the safety of the groundwater and to fulfill the conditions of protecting water resources in the determined Regions. The committee may form subcommittees to carry out specific works. The committee is to raise a report to the Minister every four months.

Article 5: This Decision shall be published in the Official Gazette and shall be effective from the date of publication.

Issued on 24/3/1422H Correspondent to 16/06/2001

Dr. Khamis Bin Mubarak Bin Essa Al-Alawi

Minister of Regional Municipalities, Environment and Water Resources

Maps for the Water Supply Wellfields Protection Zones in Ad Dhahirah Region

Coordinates for the Water Supply Wellfields Protection Zones in Ad Dhahirah Region

Wilayat of Al buraimi Water Supply Wellfield Protection Zones

Wilayat	Water Collection	Red Zone		Orange Zone		Yellow Zone
	Area					
Al buraimi	Wadi Masalik	*		The area surrounding the red. Its coordinates are:		The rest of the water collection area.
		area as follows:				
		North	East	North	East	

(A)	0395600	2685000	0393000	
2675400	0397600	2685000	0404000	
2675400	0397600	2680000	0404000	
2676400	0398600	2674000	0399000	
2676400	0397600	2674000	0395000	
2677900	0397100	2675500	0395600	
2677900	0395600	2675600	0397600	
2678400	0395100	2676500	0398600	
2680450	0394100	2678000	0398600	
2680450	0393950	2678500	0395600	
2679200		2680400	0395000	
(B)	0403050	2680400	0394000	
2682450	0399500	2679100	0393000	
2682450	0399500			
2680400	0401000			
2679900	0403050			
2681900				
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Coordinates for the Water Supply Wellfields Protection Zones in Ad Dhahirah Region

Wilayat of Mahdah Water Supply Wellfield Protection Zones

Wilayat	Water Collection Area	Red Zone Orange Zone		Yellow Zone		
Mahdah	Wadi Mahdah	Wilayat of Mahda	di Mahdah in center of h near of the Wali area of 4.8 Km2. The area as follows:	The area surrounding the red zone and covers an area of 42 Km ² . Its coordinates are:		
		North	East	North	East	
		2699490	0394640	2699980	0392805	
		2699490	0397650	2699980	0403920	
		2697795	0394640	2696000	0403920	
		2697795	0397650	2696000	0397550	
				2695351	0393628	
				2694529	0393022	

Coordinates for the Water Supply Wellfields Protection Zones in Ad Dhahirah Region

Wilayat of Abri Water Supply Wellfield Protection Zones

Wilayat	Water Collection Area	Red Zone		Orange Zone		Yellow Zone
Abri	Wadi Ain	Flood plain o	f Wadi Ain about 30 Km ²	The area surro	ounding the red zone. Its	The rest of the water
	(AI Masarrat)		Wilayat of Abri. The the area as follows:	coordinates are:		collection area.
		North	East	North	East	
		2542000	0413500	2659461	0393576	
		2550500	0426000	2628110	0389945	
		2539000	0415050	2624850	0381600	
		2547500	0428000	2602031	0414981	
				2577037	0425141	
				2564722	0450177	
				2539585	0446540	
				2517128	0405539	
				2529805	0395742	
				2556247	0407716	
				2562405	0399371	
				2555161	0381228	
				2576169	0382883	
				2589209	0388485	

2601887 0372520	
2615474 0356531	
2631412 0373222	
2639743 0350363	
2650247 0347097	
2661150 0375036	
2654630 0383381	

Coordinates for the Water Supply Wellfields Protection Zones in Ad Dhahirah Region

Wilayat of Dhank Water Supply Wellfield Protection Zones

Wilayat	Water Collection Area	Red Zone		Orange Zone		Yellow Zone
Dhank	Wadi Bu Kurbah (AI Masarrat)	-		The area surrounding the red zone. Its coordinates are:		The rest of the water collection area.
		North	East	North	East	
		2582000	0386500	2659461	0393576	
		2585000	0396000	2628110	0389945	
		2573500	0388500	2624850	0381600	
		2576000	0398000	2602031	0414981	
				2577037	0425141	
				2564722	0450177	
				2539585	0446540	
				2517128	0405539	
				2529805	0395742	
				2556247	0407716	
				2562405	0399371	
				2555161	0381228	
				2576169	0382883	
				2589209	0388485	

2601887 0372520	
2615474 0356531	
2631412 0373222	
2639743 0350363	
2650247 0347097	
2661150 0375036	
2654630 0383381	

Regulations of the various activities that could be practiced within the water supply wellfield protection zones in Ad Dhahirah Region

Activities and Practices		AR	EA	
	Red	Orange	Yellow	Blue
Agriculture:				
 Rising of Farm animals and related activities 	А	с	с	С
 Traditional and Seasonal Farming 	В	с	С	С
 The use of synthetic fertilizers, insecticides, and weedcides. Use of biodegradable insecticides. 	A	В	С	С
	В	с	с	С
 Construction of grave yards 	A	В	С	С
 Usage of evaporative ponds for the treatment of waste generated from desalination plants. 	С	С	С	С
 Usage of injection wells to inject waste generated from desalination plants. 	А	В	С	С
 Constructing governmental dams. Constructing private dama 	С	В	В	С
 Constructing private dams. 	В	В	В	С
 Constructing residential areas. 	В	С	С	С
 Construction of above ground fuel 	А	С	С	С
 storage tanks. Construction of underground fuel storage tanks. 	А	С	С	С
 Establishment of industrial facilities, and the excursion of any industrial related activities. 	A	В	С	С
- Establishment of quarries.	А	С	С	С
 Establishment of Mines. 	А	В	С	С
Oil exploration and production:				
 Drilling and laying out oil transmission pipelines. 	А	В	с	С
 Disposal of waste water produced during drilling activities. 	А	A	A	В

	_	-	-	
 Construction of roads with barriers and corridors. 	В	С	С	С
 Construction of roads without barriers and corridors. 	A	В	С	С
Construction of sewage systems:	А			
 Construction of septic tanks 		А	в	В
 Construction of collection tanks 	A	с	с	С
Small trading businesses	В	С	С	С
 Construction of solid waste disposal facilities 	А	В	С	С
 Construction of liquid waste disposal 	А	А	с	С
 facilities Construction of hazardous waste disposal facilities 	А	A	A	A
 Erecting temporary construction camps 	A	С	С	С
 Drilling of public wells 	С	С	С	С
 Drilling of private wells 	В	В	D	D
Development Activities:				
 Execution of projects not related to Water Authority 	А	С	С	С
 Changing and developing exiting activities 	В	С	С	С

Note:

A: Not Allowed

B: Allowed only if the proper authorization from concerned governmental authority was obtained, and that is only if there are no other choices.

C: Allowed

D: Allowed only if the maximum volume of liquid to be pumped is specified in the permit obtained prior proceeding with the activity.

Regulating and controlling all possible activities and practices within the water supply wellfield protection zones in Ad Dhahirah Region

Activities and practices	Regulations and controls must be followed
Agriculture: - Rising of Farm animals and related activities	 Storing all kinds of fertilizers and pesticides above concrete bases or closed rooms dedicated for this purpose.
 Traditional and Seasonal Farming 	 Using the specified amounts of fertilizers and pesticides.
- The use of synthetic	- Using modern techniques for irrigation.
fertilizers, insecticides, and weedcides.	 Moving pumps that work by fuel away from the water source.
 Use of biodegradable insecticides. 	 Getting rid of all animals slaughtered or dead parts in sites authorized for this purpose.
	 Processing waste from dairy manufacturing and slaughterhouses in plants designated for this purpose.
	 Drilling lined pits for the collection and disposal of waste unless there are specially designated stations.
 Construction of grave yards 	 Fencing the grave yards and directing all surface water streams beyond their borders. Not allowing rainwater to be collected.
 Usage of evaporation ponds for the treatment of waste generated from desalination plants. 	 Providing concrete steaming pools lined with plastic sealing products to get rid of desalination on the surface.
 Usage of injection wells to inject waste generated from desalination plants. 	 Injecting products of desalination in the ground in an isolated geological layer to be deeper than the layers containing fresh water according to the necessary technical specifications.
 Constructing governmental dams. 	 Storage dams higher the fields of water supply wells must not be constructed.
 Constructing private dams. 	

Constructing residential areas.	 Prohibiting the establishment of absorption drilling as a way to get rid of sewage.
	 Constructing a sewage network.
 Construction of fuel storage tanks. 	 Tanks to be of two layers of steel or one layer of glass-reinforced with fiber-optic that tanks are placed in rooms lined with concrete cement provide a high volume of at least a third of the size of the tank.
	 Tanks state must be observed and taps must be locked.
	 Monitoring levels and stock quantities of fuel carefully by electronic devices have the ability to register in Loggers.
	 Pressure to be tested annually.
	 Constructing inspection rooms allow observing tanks emerging pipes.
Establishment of industrial	- Conducting an environmental survey to determine
facilities, and the execution of any industrial related activities.	the industrial waste and ways to process them before disposal.
	 Choosing the best way to get rid of waste according to their nature.
- Establishment of quarries.	- Strict adherence to the specified depth of
- Establishment of Mines.	dredging.
	- Not to change the valleys main streams.
	 Not to throw acoustic material in the valleys.

Activities and practices	Regulations and controls must be followed
Oil exploration and production:	 Not to expose fresh water aquifers to drilling fluids of high salinity.
 Drilling and laying out oil transmission pipelines. 	 Layers of fresh water shall not be left uncovered when drilling saltwater aquifers
 Disposal of waste water produced during drilling 	- Provide the pipes with electronic devices connecting to

activities.	the central alarm device to determine leakage.
	 All pipelines have to be equipped with leakage monitoring equipments with a central alarm system
	 Injecting water accompanied with oil in its original aquifer
	 Conducting EIA's for the disposal of waste water produced as a result of oil drilling
 Construction of roads with barriers and corridors. 	 Constructing water channels on both sides of the road in addition to insulted water collection pits every 1 km
 Construction of roads without barriers and corridors. 	 Minimizing the number of road exists as much as possible
Construction of sewage systems:	 Designing the water waste treatment stations with the proper technical standards depending on the use of the treated water is used for
 Construction of septic tanks Construction of collection tanks 	 Discharging of water into the aquifer is not allowed, unless the quality of that water is of potable water
	 Separation of oil and all chemical compounds from water and have it treated separately, before discharging of water into the sewer system
	 Providing well lined septic tanks, in the absence of the proper sewage system
Small trading businesses	 Using soak away pits for the disposal of waste water is not allowed
 Construction of solid waste disposal facilities 	 Choosing the facility location after conducting the proper hydrological surveys only
 Construction of liquid waste disposal facilities 	- Lining the landfills properly
 Construction of hazardous waste disposal facilities 	 Comparing of waste and covering it daily Designing the facility to fit the nature of the waste
 Erecting temporary construction camps 	 Prohibiting the construction of Soak Away Pits, and demanding the establishment of collection pits
Drilling of public wellsDrilling of private wells	 Should comply with the conditions and standards listed in the Falaj and Well regulatory Law issued by Ministerial Decree No. (264/2000)
Development Activities:	- Storing of all Hazardous chemicals, oil and paint

 Execution of projects not related to Water Authority 	containers on a concrete base
 Changing and developing exiting activities 	- water is to be recycled
	 All cleaning and construction activities are to be done in the designated concrete lined areas.
	 collecting all solid waste in the proper containers prior to transferring into the designated disposal facilities
	 complying with all activities related to the protection of water resources according to the nature of these activities.