Ministerial Decree

No. (308/2001)

Adding Salalah Water Supply Wellfield Protection Zones to the Ministerial Decree No. 196/2001

- 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 Ministerial Decree No. (45/88) on Salalah Water Supply Wellfield Protection Zones
- And the Ministerial Decree No. (196/2001) on Determination of Dhofar Governorate Water Supply Wellfield Protection Zones
- And to the General Public best of interest,

DECIDED

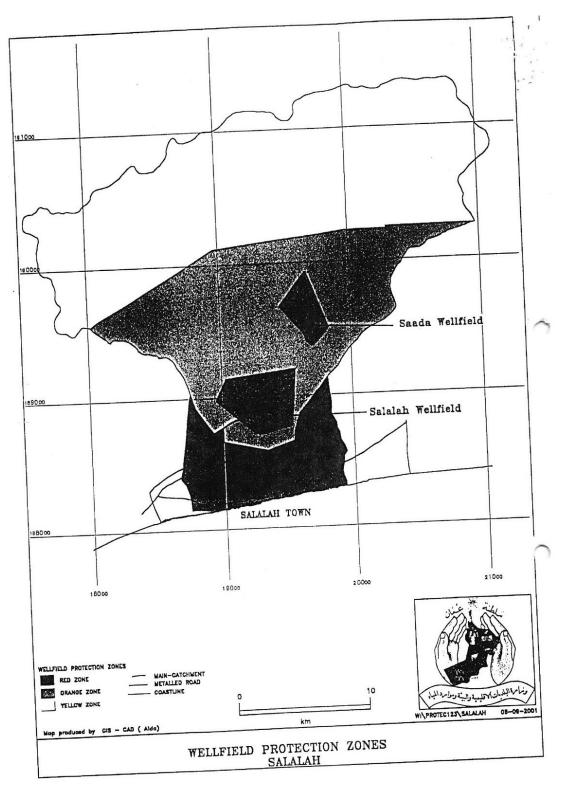
- **Article 1:** Salalah Water Supply Wellfield Protection determined according to the maps and coordinates included in the two appendixes shall be added to Article (1) of the Ministerial Decree No. (196/2001).
- Article 2: Ministerial Decree No. (88/45) shall be cancelled
- **Article 3:** This Decree shall be published in the Official Gazette and shall be effective from the date of publication.

Issued on 28/8/1422H Correspondent to 14/11/2001

Dr. Khamis Bin Mubarak Bin Essa Al-Alawi

Minister of Regional Municipalities, Environment and Water Resources

APPENDIX (1)



Maps for the Water Supply Wellfields Protection Zones in Salalah

APPENDIX (2)

Coordinates for the Water Supply Wellfields Protection Zones in Salalah

Salalah Water Supply Wellfield Protection Zones

Wilayat	Water Collection Area	Red Zone	;	Orange Z	one	Yellow Zone	Blue Zone
Salalah	Wadi Nahiz, Wadi Sahnot and Wadi Jarziz	Consists of two separated areas: - Red Zone (A): Covers Salalh Decimal Water Supply Wellfield - Red Zone (B): Covers Alsaada New Ciry Triple Water Supply Wellfield. Its coordinates are:		Surrounds the red zone and covers Wadi Nahiz, Wadi Sahnot and Wadi Jarziz's drainage areas. Its coordinates are:		The rest of the water collection area.	From the orange zone to the sea.
		North	East	North	East		

APPENDIX (3)

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

Activities and Practices	AREA			
Activities and Tractices	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. 	А	В	С	С
 Use of biodegradable insecticides. 	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. 	С	В	В	С
 Constructing private dams. 	В	В	В	С
 Constructing residential areas. 	В	С	С	С
 Construction of above ground fuel 	A	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. 	A	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:	A			
 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	A	В	с	С
facilities Construction of liquid waste disposal 	А	А	с	С
 facilities Construction of hazardous waste disposal facilities 	A	А	А	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.

APPENDIX (4)

Regulating and controlling all possible activities and practices within the water supply wellfield protection zones in Salalah

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	Drobibiting the establishment of charaction dulling
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 facilities, and the execution of any industrial related activities.	 Conducting an environmental survey to determine 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 dredging.
- Establishment of Mines.	
	 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 	 Discharging of water into the aquifer is not allowed, unless the quality of that water is of potable water
tanks	 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 Comparing of waste and covering it daily
 Construction of hazardous waste disposal facilities 	 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.