Appendix F
Utility Development Protocol

UTILITY DEVELOPMENT PROTOCOL
FOR DESERT TORTOISE PRESERVE AREAS

TERMS AND CONDITIONS

I. NEW UTILITY CONSTRUCTION AND EXPLORATION

New utility development is allowed in preserve areas for the purposes of utility development and maintenance. These include tanks, wells, pumps, water lines, electrical distribution lines, pipelines, sewer lines, and access roads. The following terms are established to protect the desert tortoise during utility development and maintenance in preserve areas:

1. A contact person from the entity performing the construction shall act as the contact representative to the Service. He/she will be responsible for overseeing compliance with protective stipulations as stated in this protocol.

2. All pre-construction activities which could take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur in the presence of a qualified biologist. Any hazards to tortoises that may be created by this activity, such as drill holes or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by desert tortoises.

   A. A qualified biologist shall conduct pre-construction clearance surveys. Any winter dens discovered during the pre-construction survey shall be avoided or mitigated.

   ? (B.) All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, laydown/staging areas etc.

3. The entity shall ensure that during construction their contractors comply with the mitigation measures contained within this protocol. These measures are:

A. A qualified biologist shall monitor construction activities to ensure compliance with protective stipulations for the desert tortoise.

B. Any desert tortoises which are found within the project area during construction shall be moved by a qualified biologist out of harms way.

C. Open trenches will be backfilled within 72 hours, whenever possible. All open trenches shall be checked three times a day for trapped desert tortoises. If a desert tortoise is found in the trench, the biological monitor shall notify the qualified biologist to have the animal removed. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches that are not backfilled within 72 hours shall have a barrier installed around them that will preclude entry by desert tortoises.

D. Desert tortoise burrows shall be avoided to the maximum extent feasible. A qualified biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only.

E. All water pipes stored within desert tortoise habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of construction inactivity to prevent entry by desert tortoises.

F. A worker education program shall be implemented prior to the onset of construction. All construction employees and visitors shall be required to read the educational brochure prior to the onset of construction. All construction

employees and visitors shall be required to read the educational brochure prior to entering the site. The brochure shall describe the sensitive species which may be found in the area and the appropriate measures to take upon discovery of a sensitive species. All project personnel shall sign an affidavit that they have read and understand the material presented in the brochure.

G. Topsoil removed during trenching shall be respread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the pre-construction process.

H. All test pump water will be routed to the nearest wash or natural drainage. The route will be evaluated by the biological monitor. If tortoises are found in the drainage area the qualified biologist will remove the tortoises.

4. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard road and pipeline corridors. Other construction areas including well sites, storage tank sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fences, flagged, or marked areas.

5. Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.

6. Any burrows in the path of construction shall be checked for desert tortoise. Unoccupied burrows which can not be avoided shall be destroyed at that time. If the burrow is occupied and can not be avoided during construction, the burrow shall be excavated by

hand and the desert tortoise moved up to 250 feet from where it was found and placed in a natural burrow of similar shape and size. If a natural burrow is unavailable, the desert tortoise shall be placed in a hand excavated burrow of the same size, shape, depth and orientation as the one in which it was found.

7. Only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but which could be at risk from accidental crushing, shall be protected by the placement of deterrent fencing between the burrow and the right-of-way. The fencing shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the right-of-way. Installation and removal of such fencing shall be under the direction and supervision of the biological monitor.

8. Any tortoise found above ground and not near the mouth of its burrow shall be moved up to 250 feet from where it was found and placed in the shade of a shrub.

9. All trenches, pits, or other excavations shall be inspected for desert tortoises by the biological monitor prior to filling. These areas shall be inspected at least three times a day while they remain open. If any desert tortoises are found, they shall be carefully moved by the qualified biologists.

10. All trash and food items shall be promptly contained and regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.

11. Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the qualified biologist and graded. Construction activities shall not be permitted between dusk and dawn in areas not previously graded.

12. No handling of desert tortoises will occur when the air temperature at 15 centimeters aboveground exceeds 90 degrees Fahrenheit.

13. Tortoises are not to be removed from burrows from November 1 through March 15 until appropriate action is determined by the Service with respect to the tortoises. The Service response shall be carried out within 72 hours.

14. If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

15. Poles or other above ground structures necessary for water development shall be minimized as much as possible. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.

II. Operation and Maintenance

In order to perform routine operation and maintenance, employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of burrows and tortoises; locating and handling of tortoises if removal is required; burrow excavation and relocation; education on constructing burrows; and instructions on installing tortoise fencing. During the course of basic operation and maintenance desert tortoise will be avoided if at all possible.

Non trained employees shall not perform maintenance operations within the non-take areas.

III. Disposition of Sick, Injured, or Dead Specimens

Upon locating dead, injured, or sick desert tortoises, initial notification must be made to the Service or The Utah Division of Wildlife Resources within three working days of its finding. Written notification must be made within 5 calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the qualified biologist. Should any treated tortoises survive, the Service or the Utah Division of Wildlife Resources should be contacted regarding the final disposition of the animals.

IV. Definitions

A. Qualified biologist - As a general rule, a qualified desert tortoise biologist is defined as a person with a bachelors degree or graduate degree in biology, ecology, wildlife biology, herpetology, or related fields. He/she must have demonstrated prior field experience using accepted resource agency techniques to survey for desert tortoises. Field experience may mean a minimum of 60 days field experience searching for tortoises and tortoise sign. The qualified biologist is they only person that can handle the tortoises.

B. Biological monitor - The biological monitor has a specific training on the biology and habits of the desert tortoise. This person is not permitted to handle the tortoises. When a tortoise is identified for removal by the biological monitor he/she will call upon the qualified biologist to remove the tortoise. It is preferable that the biological monitor has some background in biology.

C. Barrier fence - A fence designed to protect the desert tortoise from harm.

D. Educational brochure - A brochure intended to explain to construction crews as well a visitors the desert tortoise and their habitat which are found within the area. The brochure will also explain the appropriate measures to take if a desert tortoise or burrow is located or accidently harmed.

E. Burrow - A temporary cover site in soil that the desert tortoise excavates.

F. Winter den - A permanent structure that is inhabited by desert tortoise during hibernation. The winter den is usually in solid rock or sometimes in soil. The winter dens are to be avoided or mitigated during the pre-construction phase.

G. Acceptance criteria - Prior to construction of surface disturbances in non-take areas the Service will be notified of the new project. After the Service reviews the project an acceptance criteria will be issued. The acceptance criteria will be issued in accordance with the terms of the water development protocol.

V. AMENDMENTS

The protocol for water development will be amended to include species which may be listed in the future to accommodate water development.