

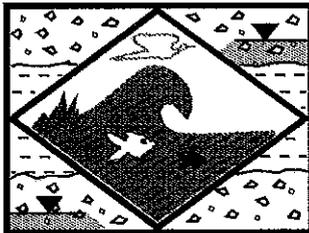
Application of Lawn Fertilizers and Pesticides to Salt Lake Valley Groundwater Recharge Areas

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ABSTRACT

Homeowners, chemical applicators, and commercial lawncare companies apply chemicals to lawns and ornamentals overlying the recharge zone of Salt Lake Valley's principal aquifer. These applied fertilizers, herbicides, insecticides, and fungicides can potentially leach far enough to contaminate ground water. This report summarizes a study conducted in 1993-1994 to determine the type, rate, and frequency of applying chemicals to lawns and ornamentals in the recharge zone. Surveyed are lawncare companies, chemical applicators, schools, churches, hospitals, parks, homeowners, and government documents and community and state regulations. Results will help assess the potential impact of these applications on future ground water quality.

CHAPTER I

INTRODUCTION

1.1 Background

To serve their intended purpose, lawns and ornamentals in residential areas, parks, and recreational centers should be properly managed. A well balanced supply of essential nutrients should be provided throughout the growing season. Lawns should be free of weeds and diseases. An abundance of weeds and infectious diseases in turf areas is evidence that conditions are unsatisfactory for turf grass growth.

Chemicals used to control weeds and diseases in lawn areas can potentially leach and contaminate underlying ground water. Pimentel and Levitan (1986) reported that the amount of pesticide reaching target pests is generally very small in relation to the total amount applied. The rest degrades and/or pollutes the environment by contaminating soil, water, and perhaps affecting nontarget organisms. Cohen et al., (1984) reported that 17 pesticides had been detected in the ground water of 23 states. Pesticide concentrations ranged from a mere trace to several hundred parts per million.

Ground water contamination by pesticides, fertilizers, or other organic materials is of great concern, especially in places where ground water supplies most of the drinking water. Ground water supplies domestic water for about 50% of the U.S. population (Leonard et al., 1988). Waddell (1987) reported that 63 percent of Utah's population is dependant on ground water for drinking supplies.

Rural areas are almost totally dependent on ground water for their domestic water needs.

A goal of the Ground Water Protection Program of the Utah Department of Agriculture (1988 and 1989) is to manage the use of fertilizers and pesticides to protect ground water resources. Regions of the state that are relatively vulnerable to contamination by pesticides have been identified by Eisle et al., (1989) and Ehteshami et al., (1990). In arid Utah, pesticide contamination usually occurs where there is irrigation. When applied to agricultural crops or lawns, pesticides can potentially leach through the root zone and the unsaturated zone to the water table (top of the saturated zone in an aquifer). The time required for pesticides to reach ground water depends on irrigation efficiency, type of chemical, quantity applied, distance to the water table, hydrology, stratigraphy, climate, and topography.

The recharge areas that abut the Wasatch mountains in Salt Lake Valley contain water of excellent quality. In Utah this water is classified as Class 1-pristine if total dissolved solids are less than 500 mg/l. Located within the recharge area of the principal Salt Lake Valley aquifer are homeowners who frequently apply fertilizers and pesticides to lawns. These chemicals, if not degraded or transformed, will eventually leach out of the soil and can potentially contaminate ground water (personal communication with Mr. Robert Barnes, Department of Environmental Quality). Waddell et al., (1987) reported that contamination exists within the shallow unconfined aquifer underlying much of

Salt Lake County. Some of the contamination results from percolating water containing large dissolved-solids concentrations. Solid-waste dumps, landfills, road salts, and tailings ponds contribute to contamination. Urban activities, such as pesticides application to lawns, oil spills, and runoff from streets, also contaminate the shallow unconfined aquifer (Baskin 1990).

The principal deeper aquifer has been contaminated by leachate and waste water from mining operation and mill tailings in local areas of Salt Lake Valley. Some areas contain high concentrations of dissolved solids. Contaminated domestic and irrigation wells yielded concentrations of dissolved solids that exceed 2000 mg/L (Waddell et al., 1987). Water in the upper part of the principal aquifer has been also contaminated by leachate containing high concentrations of dissolved solids, chloride, sulfate, and iron from uranium-ore tailings in the north-central part of the valley.

1.2 Objective and Tasks

It is important to be able to assess the impacts of lawn-applied chemicals on ground water quality in Salt Lake Valley. Before such a study can be conducted, we must know how much and what types of chemicals are being applied to the recharge areas. Providing this information is the objective of this report.

Tasks within this study are to:

- 1) Survey existing government documents, community, and state regulations

regarding use of pesticides and fertilizers on lawns and ornamentals.

- 2) Survey chemical applicators to determine what chemicals are used, in what amounts, how frequently they are applied, and the spatial distribution of application.
- 3) Survey churches, hospitals, schools, parks, and golf courses to determine the type, amount, and frequency of chemical application to lawn areas.
- 4) Survey selected homeowners to determine the extent of usage of commercial chemical applicators and owner-applied chemicals.
- 5) Survey the Utah Department of Transportation to determine the extent of chemical usage for roadway and corridor maintenance.

Collected data will identify areas where most chemicals are applied. This information will be made available to agency personnel. Future work can involve predicting where the greatest potential exists for contaminants to reach ground water. That information can be used within management models to help protect ground water quality in Salt Lake Valley. In the future, it will help Cooperative Extension Services (CES) personnel show clients how to properly manage applications of fertilizers and pesticides to lawn areas and so avoid unnecessary ground water contamination.

CHAPTER II

LITERATURE REVIEW

2.1 Pesticide Usage

To keep up with increasing population and demand for food, recreation, and housing, pesticides and fertilizers have become widely used. The U.S. Environmental Protection Agency (1972) reported that more than 34,000 registered pesticide products are manufactured from 900 different chemical compounds. By 1987 that number increased to 45,000 registered products manufactured from 1,400 chemical compounds. In 1992-1993, the EPA reported 860 active ingredients registered (EPA, 1994). The EPA (1994) also reported that in 1993 the quantity of pesticides used in non-agricultural sectors of the U.S. ranged from 2-15 million pounds active ingredient (ai). Pimentel and Levitan (1986) reported that the use of pesticides in the United States (primarily synthetic organic pesticides) had reached almost 500 million kg each year. About 68% of these were used on agricultural lands, of which 60% are herbicides, 24% are insecticides, and 16% are fungicides. Fifty five million kg of pesticides were used on government and industrial lands, 4 million kg were used on forest land, and 55 million kg were used on household lands.

Ground water contamination is widely regarded as one of the major environmental problems associated with pesticide use in the 1980's, 1990's, and beyond (Pye et al., 1983). According to Parsons (1988), whether or not pesticides have been detected in the ground water of a state depends on whether

they have been monitored for. Cohen et. al., (1984) reported that as of 1986, 17 different pesticides, including some of the most widely used chemicals in the United States, have been detected in U.S. ground water.

In Utah, Eisele et al., (1989) identified and ranked sites with different potential hazards for ground water contamination for 29 counties in the state of Utah. They initially used a rapid screening procedure, DRASTIC (Aller et al., 1985). They then used a one dimensional model, CMLS, (Nofziger and Hornsby, 1986) to simulate the movement of pesticides in unsaturated soils in locations of higher risks. Results indicated that significant contamination of extremely shallow aquifers can be expected in some locations. Simulations for specific locations indicated that of the 64 chemicals applied in Utah 22 might reach a depth of 3.0 m, with 18 reaching this depth in significant concentrations.

The potential of a pesticide to reach ground water depends upon its physical-chemical properties, soil characteristics, method and rate of application, climate, and amount and timing of irrigation water. Physical-chemical properties include: water solubility, adsorption, degradation, chemisorption and binding of residues, and ionization. Soluble pesticides that do not quickly degrade and are not strongly adsorbed are most likely to contaminate ground water. The concentration of the pesticide moving with soil water decreases as adsorption increases. Degradation might or might not produce less active intermediate products. Table 1 shows the chemodynamic properties for several pesticides.

- Soil properties influencing pesticide leaching include clay content, texture

Table 1. Solubility (S), Organic Carbon Partition Coefficient (K_{oc}), Henry's Constant (K_h), Vapor Pressure (VP), and Degradation Half-Life ($t_{1/2}$) for Several Pesticides (Ehteshami et al., 1990)

Pesticide	S (mg/l)	K_{oc} (ml/g)	K_h	V_p (Pa)	$t_{1/2}$ (days)
Alachlor	2.42E+02 ¹	1.90E+02	1.30E-06	2.90E-03	7
Aldicarb	9.00E+03	1.00E+01	1.00E-04	1.30E-02	28
Atrazine	3.20E+01	1.60E+02	2.50E-07	4.00E-05	71
Bromacil	8.20E+02	7.20E+01	3.70E-08	3.30E-05	350
Captan	3.30E+00	3.30E+01	4.90E-05	1.30E-03	3
Carbaryl	4.00E+01	2.29E+02	1.40E-03	6.70E-01	22
Carbofuran	3.20E+02	2.80E+01	3.10E-07	2.70E-03	40
Chlordane	1.00E+00	3.80E+04	2.20E-04	1.30E-03	3500
Chorpyrifos	2.00E+00	6.07E+03	1.80E-04	2.50E-03	63
Cyanazine	1.71E+02	1.68E+02	1.20E-04	2.00E-01	108
2,4-D	9.00E+02	2.00E+01	5.60E-09	5.30E+01	15
DBCP	1.00E+03	7.00E+01	1.70E-02	1.06E+02	180
DDT	3.00E-03	2.40E+01	2.00E-03	2.50E-05	3837
Diazinon	4.00E+01	8.50E+01	5.00E-05	9.70E-05	32
Dieldrin	1.50E-01	1.20E+04	6.70E-04	4.00E-02	868
Disulfoton	2.50E+01	1.60E+03	1.10E-04	2.40E-02	5
Diuron	3.70E+01	3.80E+02	5.40E-08	4.10E-04	328
EDB	3.40E+03	4.40E+01	3.50E-02	1.50E+03	3650
EPTC	3.70E+02	2.80E+02	5.90E-04	4.50E+00	30
Fenamiphos	7.00E+02	1.71E+02	2.40E-08	1.33E-04	10
Fonofos	1.30E+01	6.80E+01	2.20E-04	2.80E-02	60
Heptachlor	5.60E+02	2.40E+04	1.45E-01	5.30E-02	2000
Lindane	7.50E+02	1.30E+03	1.30E+04	5.60E-03	266
Linuron	8.10E+01	8.60E+02	2.50E-06	2.00E-03	75
Malathion	1.45E+02	1.80E+03	5.00E-06	5.30E-03	1
Methyl- Bromide	1.30E+04	2.20E+01	1.50E+00	5.20E-05	55
Methyl- Parathion	5.70E+01	5.10E+03	4.40E-06	1.30E-03	15
Monuron	2.60E+02	1.80E+02	7.60E-09	6.70E-05	166
Napropamide	7.30E+01	3.00E+02	7.90E-07	5.30E-04	70
Oxamyl	2.80E+05	6.00E+00	9.90E-09	3.10E-02	6
Parathion	2.40E+02	1.10E+04	6.10E-06	5.00E-03	18
Phorate	5.00E+01	6.60E+04	3.10E-04	8.50E-05	82
Picloram	4.20E+02	2.60E+01	1.90E-08	8.20E-05	138
Prometryne	4.80E+01	6.10E+02	5.60E-07	1.30E-04	60
Propachler	6.10E+02	4.20E+02	4.40E-06	3.10E-02	7
Simazine	5.00E+00	1.40E+02	3.40E-08	8.10E-07	75
Terbacil	7.10E+02	4.60E+01	8.20E-09	6.50E-05	50
Triallate	4.00E+00	3.60E+03	7.90E-04	1.60E-02	100
Trifluralin	3.00E-01	7.30E+03	6.70E-03	1.40E-02	132

Source: Rao et al. (1985): Adapted from Jury et al. (1984).

¹ 2.42E+02 = 2.42 * 10² = 242

and structure, soil organic matter, and soil depth. Adsorption of unionized pesticides is less in soils with high clay content than in soils with high organic matter content. Soil texture and structure influence the dispersion of pesticides as they leach because water follows different pathways as it percolates.

Soluble pesticides move with water in the vadose and saturated zones. Water movement in the vadose zone is by capillary and mass flow. The downward movement of water through the soil profile occurs mainly through medium to large soil pores. However, fast movement of water through preferential paths (cracks or channels in the root zone or subsoil), permits dissolved substances to reach ground water more rapidly than otherwise expected.

In light soils, herbicide moves by leaching (Merkle et al., 1967). The greatest herbicide concentrations were found at the deepest sampling depth. Davidson et al., (1968) found that the rate at which fluometuron and diuron move through uniformly packed soil columns depends on the water flux.

Regulations alone cannot guarantee the protection of ground water from chemical contamination. Some on-site practices can reduce the potential for contaminating ground water by pesticides. Holden (1986) listed some agricultural management practices to mitigate pesticide/ground water quality problems. These practices include: 1. Improving irrigation efficiency. Applying sufficient water to meet crop water evapotranspiration and satisfy salinity leaching requirements without causing excess deep percolation can reduce the depth that pesticide reaches. 2. Utilizing best management practices for pesticide use.

Following label instructions and carefully calibrating pesticide spray equipment can minimize the mass of the chemical leaching.

According to Eisele et al., (1989), pesticide selection and agricultural practices such as irrigation and time and rate of pesticide application can significantly influence pesticide movement. Peralta et al., (1994) show how to determine the best irrigation application rates for a particular site, crop, and pesticide. Aly and Peralta (1993) presented software (CANDI) to aid developing best management practices for pesticide and irrigation management.

Ranja et al., (1991b and 1992a) examined how the use of appropriate management techniques (sprinkler irrigation system design and pesticide selection) can reduce pesticide leaching and potential ground water contamination. They present procedures for selecting an appropriate sprinkler system design and pesticide. Ranja et al., (1991a and 1992b) simulated pesticide movement under different furrow irrigation designs, water management practices (irrigation scheduling), soil type, and pesticide parameters. They used a hydrodynamic-wave irrigation model to estimate water infiltration for different furrow lengths. They concluded that potential ground water contamination can be reduced by integrated use of best management practices (BMPs). Considered BMPs include, careful selection and use of pesticides, efficient furrow irrigation designs and improved water management (irrigation scheduling).

Chemical application on lawns in residential, commercial, and recreational areas should be managed carefully. Olson (1991) discussed ways of minimizing

the need for lawn chemicals while obtaining a healthy and beautiful lawn. Alternatives include: 1)- choosing a grass variety that is compatible with soil and climatic conditions in the area, 2)- mowing at frequent intervals, never removing more than the top third of the grass blade, 3)- leaving grass clippings to decompose naturally in the soil, 4)- using sharp mower blades which will not shred the grass leaf and will thereby prevent disease, 5)- using lawncare products in the recommended rates.

Schroeder (1991) recommended reading and following label instructions and the manufacturer-provided Material Safety Data Sheet. He also discussed environmentally safe alternatives for pesticide use and presented some less toxic and environmentally safer compounds.

Montana State University, Utah State University, and the University of Wyoming extension services (Dewey et al., 1994-1995) listed the kinds, rate, and time, of registered herbicides for use on lawns and ornamentals (Table 2). If not used according to label instructions these herbicides can potentially contaminate underlying ground water.

2.2 Fertilizer Usage

Nitrogen, phosphorous, potassium, calcium, magnesium, and sulfur are essential nutrients that must be applied to grass to obtain a healthy lawn (Sprague 1982). Nitrogen is needed in the greatest amounts. The turfgrass nitrogen requirement is affected by: grass species, soil type, and hydrological data. If applied in excessive amounts, nitrogen can leach to the water table. Leached

Table 2. Chemicals for Weed Control on Lawns and Turf (Source: Weed Control Handbook)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

asulam (Asulox)	Rate:	2 lbs ai/A
	Time:	Apply to established turf after emergence of crabgrass and goosegrass.
	Remarks:	For use on St. Augustinegrass and Tifway 419 bermudagrass turf.
	Caution:	Follow all label precautions and restrictions. Do not use a surfactant. Do not apply to turf which is under stress or freshly mowed. One application per season.
benefin (Balan) (Benefin)	Rate:	2 to 3 lbs ai/A
	Time:	Apply to established turf prior to crabgrass germination.
	Remarks:	Primarily for the control of crabgrass and other annual grassy weeds in established lawns and turf. May give partial control of some annual broadleaf weed species.
	Caution:	Follow all label precautions and restrictions.
benefin + oryzalin (XL)	Rate:	2 to 3 lbs ai/A
	Time:	Apply to established turf prior to emergence of weeds.
	Remarks:	For selective control of many annual grasses and some annual broadleaf weeds in established warm-season turf (bermudagrass, St. Augustinegrass, tall fescue, etc.).
	Caution:	Follow all label precautions and restrictions.
benefin + trifluralin (Team)	Rate:	2 to 3 lbs ai/A
	Time:	Apply to established turf in the spring 1 to 2 weeks prior to the onset of conditions favorable for annual weed grass germination.
	Remarks:	For control of annual bluegrass, smooth and hairy crabgrass, goosegrass, barnyardgrass, and green and yellow foxtail in established Kentucky bluegrass, perennial ryegrass, fescue, and bentgrass turfgrasses. Optimum weed control performance will be obtained if treated areas are irrigated soon after application.
	Caution:	Will not control established weeds. Stands of fine-leaved fescue varieties may be thinned at rates above 2.0 lbs ai/A. See label for reseeding restrictions.
bensulide (Bensumec) (Betasan) (Lescosan)	Rate:	7.5 to 15 lbs ai/A
	Time:	Apply to established lawn or turf in the early spring before crabgrass germinates.
	Remarks:	Controls crabgrass, annual bluegrass, barnyardgrass, henbit, and other annual weeds in well-established lawns and turf.
	Caution:	Follow all label precautions and restrictions.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

bensulide + oxadiazon (Scott's Goosegrass and Crabgrass control) Rate: 7.5 lbs ai/A
 Time: Before grasses germinate in the spring.
 Remarks: Prevents crabgrass and other annual grasses.
 Caution: Read and follow all label instructions.

bentazon (Basagran) Rate: 1.0 to 2.0 lbs ai/A
 Time: Apply after most nutsedge plants have emerged and are actively growing. Additional treatments may be necessary at intervals of 10 to 14 days.
 Remarks: For control of yellow nutsedge in established bluegrass, bentgrass, fescue, ryegrass, or bermudagrass turf. Delay mowing for 3 to 5 days before or after spraying.
 Caution: Do not apply more than 3 quarts per acre per season. Do not apply on golf course greens. Avoid over-the-top spraying of adjacent trees, shrubs, or flowers.

bromoxynil (Buctril) Rate: 0.375 to 0.5 lbs ai/A
 Time: After desirable grass has emerged, but before broadleaf weeds exceed the two- to four-leaf stage.
 Remarks: Controls annual broadleaf weeds in newly planted or established turf. Does not control any grasses. Weeds beyond the specified growth stage will not be controlled. No longer a restricted-use herbicide.
 Caution: For use only on non-residential turf, industrial sites, and non-crop areas. Approved only for application through boom-type sprayers.

chlorsulfuron (Lesco TFC) Rate: (See label for specific rate instructions)
 Time: Use when grass is actively growing and not stressed by cold weather or drought.
 Remarks: Selectively controls tall fescue and ryegrass in Kentucky bluegrass, fine fescue, bentgrass, and bermudagrass turf. Also controls a wide variety of broadleaf weeds. Use a non-ionic surfactant.
 Caution: Do not use on bentgrass shorter than 1/2 inch. Use only on well-established, actively growing lawns. Do not apply near trees or other desirable plants where roots may extend into treated soil.

dazomet (Basamid) Rate: 346 lbs ai/A
 Time: Apply when soil temperature is between 54° and 64° F.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

	Remarks:	A non-selective, granular soil fumigant for control of weeds, nematodes, and many soil-borne diseases prior to seeding of new turf grasses, or for killing all weeds and existing turf grass areas prior to complete renovation.
	Caution:	This product is toxic to all plants. Do not apply within 4 feet of desirable plants or within the drip line of trees and large shrubs. Follow all label instructions, precautions, and restrictions.
DCPA (Dacthal)	Rate:	10 to 15 lbs ai/A
	Time:	Apply in early spring before crabgrass germinates.
	Remarks:	For control of crabgrass in established lawns and turf. Lawn should be watered immediately after herbicide application.
	Caution:	Follow all label precautions and restrictions.
dicamba (Banvel)	Rate:	0.05 to 0.25 lb ai/A
	Time:	Apply to established grass when weeds are actively growing.
	Remarks:	Controls many annual and perennial broadleaf weeds in established lawns and turf. Weeds controlled include plantain, spurge, clovers, knotweed and yarrow. Often included in garden-store formulations containing 2,4-D or 2,4-D + mecoprop.
	Caution:	Do not treat within the drip line of trees or in areas where downward movement of herbicide into the soil or surface washing of soil may cause contact of dicamba with roots of trees, shrubs, or other desirable plants. Follow all other label precautions.
dtthlopyr (Dimension)	Rate:	0.25 to 0.5 lb ai/A
	Time:	Can be applied preemergence or after the crabgrass has become visible.
	Remarks:	For control of many annual broadleaf and grassy weeds in established lawns and turf. Weeds controlled include prostrate spurge, chickweed, annual bluegrass, and smooth crabgrass.
	Caution:	Do not apply to trees, shrubs, flowers, or vegetables. Keep off treated area until spray has dried. Do not repeat applications during a growing season.
ethofumesate (Prograss)	Rate:	0.75 to 1.95 lbs ai/A
	Time:	Established Kentucky bluegrass: September 1 to December 1. Established perennial ryegrass: 2 to 4 weeks prior to main period of annual bluegrass germination in early fall or late spring, up to 30 days after emergence.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE

GENERAL GUIDELINES (Always read label for complete instructions)

	Remarks:	For use on ornamental turf sites such as golf courses and parks. Not for use on homeowner lawns. Primarily for control of annual bluegrass in established Kentucky bluegrass and perennial ryegrass turfs. One to three applications, allowing 21 to 30 days between treatments.
	Caution:	Lower rates required on Kentucky bluegrass. Golf course applications are restricted to fairways and roughs. Do not apply within 8 weeks following application of any plant growth regulator.
fenoxaprop (Acclaim) (Horizon)	Rate:	0.03 to 0.35 lb ai/A
	Time:	Apply to turf when grassy weeds are in the one-leaf to three-tiller stage.
	Remarks:	For control of crabgrass, barnyardgrass and foxtail species, and suppression of johnsongrass and bermudagrass. Does not control broadleaf weeds. May be applied to established perennial ryegrass, fine and tall fescue, bentgrass, and Kentucky bluegrass turfs. Bentgrass must be established for at least one growing season. Other species should be established at least 4 weeks and tillered, prior to treatment.
	Caution:	Temporary stunting or yellowing can occur on some cultivars of Kentucky bluegrass. Do not exceed 0.25 lb ai/A on Kentucky bluegrass turf. Do not apply to bentgrass putting greens. Consult label for tank mix options.
glyphosate (Roundup) (Avail)	Rate:	0.75 to 1.1 lb ae/A (annuals); 1.5 to 3.0 lbs ae/A (perennials)
	Time:	Apply before planting grass. Weeds should be actively growing and in the growth stage specified on the label.
	Remarks:	Controls annual and perennial grasses and broadleaf weeds prior to establishment or renovation of lawns or turf. Allow at least 3 days before tillage when controlling annuals, and at least 7 days when controlling perennial weeds.
	Caution:	Will kill or severely injure any desirable grasses present at time of spraying.
imazaquin (Image)	Rate:	0.25 to 0.5 lb ai/A
	Time:	Apply to established turf after weed emergence.
	Remarks:	For use only on established warm-season turf grasses, including St. Augustinegrass, and bermudagrass. Controls sandbur, nutsedge, chickweed, henbit, wild onion, and some other weeds.
	Caution:	Follow all label precautions and restrictions.
isoxaben (Gallery)	Rate:	0.5 to 1.0 lb ai/A
	Time:	Apply in fall or spring prior to broadleaf weed germination.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

Remarks: A preemergent herbicide for use in established turf grass. Controls many annual broadleaf weeds, including chickweed, filaree, knotweed, mustards, pigweed, plantains, prostrate spurge, purslane, and woodsorrel (oxalis). High label rates provide partial control of annual bluegrass, barnyardgrass, crabgrass, and foxtails. Activate with 0.5 inch of water after application but before weeds begin to emerge.

Also formulated with a granular fertilizer and marketed as 'Galleria'.

Caution: Do not apply to seedling turf. Do not use on golf course greens. Do not use on grass grown for seed. Established turf may be reseeded in the fall following a spring application.

MCPA (Rhonox) Rate: 0.5 to 1.4 lbs ac/A

Time: Apply when annual broadleaf weeds are growing vigorously. Spring or fall application will give best results.

Remarks: Controls many broadleaf weeds including dandelion, plantain, purslane, and bull thistle. For use only in established grass areas.

Caution: Ester formulation. Follow all label precautions and restrictions. Do not use on bentgrass lawns. Do not mow within 2 days before or after application.

mecoprop (MCP) Rate: 1.0 to 1.5 lbs ac/A

Time: Apply in the spring or fall after grass is well established and weeds are actively growing.

Remarks: Controls annual and perennial broadleaf weeds, including clovers and knotweed. For use in established lawns and turf. Commonly included in garden-store formulations with 2,4-D or 2,4-D + dicamba.

Caution: Follow all label precautions and restrictions.

metolachlor (Pennant) Rate: 4 lb ai/A

Time: Apply before yellow nutsedge emerges.

Remarks: For yellow nutsedge control only in established warm-season turf grass (bermudagrass, St. Augustinegrass, etc.).

Caution: Do not use more than once per year. Do not use on cool-season turf grasses.

metsulfuron (Scott's DMC) Rate: 0.01 to 0.04 lbs ai/A

Time: Apply to emerged weeds when turf is actively growing and not stressed by cold weather or heat.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

	Remarks:	Controls a wide variety of broadleaf weeds in established turf grasses including Kentucky bluegrass, fine fescue, and bermudagrass. Weeds include hoary cress, clover, dandelion, prostrate spurge, and oxalis. Addition of non-ionic surfactant improves control.
	Caution:	Do not apply to turf under stress, or if daily high temperature exceeds 85° F. Do not apply to turf less than 1 year old. Do not exceed 0.02 lb ai/A per season on Kentucky bluegrass or fine fescue turf.
MSMA or DSMA (arsenicals)	Rate:	2.7 to 4.6 lbs ai/A
	Time:	Apply to established lawns or turf when crabgrass is in the five-leaf stage or more.
	Remarks:	Controls crabgrass, sandbur, and other annual grasses in established lawns and turf. Two or more applications at 10-to 14-day intervals may be needed. Causes tip-burn on bluegrass.
	Caution:	Follow all label precautions and restrictions.
oxadiazon (Ronstar)	Rate:	2.0 to 4.0 lbs ai/A
	Time:	Apply to established turf prior to crabgrass germination.
	Remarks:	Controls many annual grasses (including crabgrass) and annual broadleaf weeds in established lawns and turf. Is not effective in controlling prostrate spurge.
	Caution:	Follow all label precautions and restrictions.
pendimethalin (PRE-M) (Pendulum) (Stomp)	Rate:	1.5 to 3.0 lbs ai/A
	Time:	Apply to established turf prior to weed germination.
	Remarks:	Controls crabgrass, prostrate spurge, chickweed, henbit, and other annual grasses and broadleaf weeds in established lawns and turf.
	Caution:	Follow all label precautions and restrictions.
prodiamine (Barricade)	Rate:	0.33 to 0.75 lbs ai/A
	Time:	Apply prior to germination of weeds.
	Remarks:	A selective preemergence herbicide that will control certain grass and broadleaf weeds in established grass turf. Weeds controlled include crabgrass, annual bluegrass, prostrate spurge, henbit, common chickweed, and knotweed. Must be incorporated by 0.5 inch of rainfall or irrigation as soon as possible after application (not longer than 14 days). Will not harm most nearby established ornamental trees, shrubs, and flowers.

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

	Caution:	The species of turf determines the maximum amount of this product that may be applied during a year. Do not apply more than 0.75 lb ai/A in a single application, or more than a total of 1.5 lbs ai/A per season on any turf species. Do not apply through any type of irrigation system.
siduron (Tupersan)	Rate:	2 to 6 lbs ai/A (new plantings); 8 to 12 lbs ai/A (established plantings)
	Time:	Apply to established lawn or turf in the spring before emergence of annual grasses.
	Remarks:	Controls many annual grasses, including crabgrass, in established lawns and turf. Irrigate within 1 week after application if no rainfall has occurred.
	Caution:	Follow all label precautions and restrictions.
triclopyr (Turflon Ester)	Rate:	0.5 to 1 lb ae/A
	Time:	Apply after grass is well established and weeds are actively growing.
	Remarks:	Controls many annual broadleaves and some perennial broadleaf weeds in established lawns and turf, including ground ivy, oxalis, and wild violet. Use only on tall fescue, perennial bluegrass, or perennial ryegrass lawns and turf. May be tank mixed with 2,4-D.
	Caution:	Do not allow spray drift to contact desirable broadleaf plants. Do not spray if temperature exceeds 80° F.
triclopyr + clopyralid (Confront)	Rate:	0.28 to 0.56 lb ae/A
	Time:	Apply to established turf when weeds are actively growing.
	Remarks:	A non-2,4-D product that provides postemergent control of many annual and perennial broadleaf weeds. Especially effective against clover.
	Caution:	Use only on perennial ryegrass, perennial bluegrass, or tall fescue. Spray in a manner to avoid contact with non-target plants.
2,4-D (various brands)	Rate:	(Varies by product)
	Time:	Apply after grass is well established and weeds are actively growing.
	Remarks:	Controls many annual and perennial broadleaf weeds in established lawns and turf. Applications in both spring and fall may be necessary to control some difficult weeds. No more than two broadcast applications may be made per year.
	Caution:	There are many amine and ester formulations containing 2,4-D alone or in combination with other herbicides. Adhere strictly to all label instructions for the particular product used. Do not spray if wind is blowing or if air temperatures exceed label limits (usually 80° to 85° F).

Table 2 (Cont.)

1994 MT-UT-WY HORTICULTURE WEED CONTROL HANDBOOK

LAWNS AND TURF

HERBICIDE GENERAL GUIDELINES (Always read label for complete instructions)

2,4-D + 2,4-DP + MCPP (Triamine) (Dissolve) (Tri-Ester) Rate: (Varies by product) Time: Apply in the spring or early fall when weeds are actively growing. Remarks: Controls many annual and perennial broadleaf weeds in established lawns and turf. Both amine and ester formulations are available. Spot applications may be made at any time during the growing season. Caution: Do not apply to newly seeded grasses. Do not use on bentgrass. Do not apply under conditions where drift or volatilization may result (see label for temperature limitations). Do not irrigate within 24 hours after application. Do not make more than two broadcast applications per year.

2,4-D + MCPP + dicamba (Trimec Classic) (Three-Way) (Triplet) Rate: (Varies by product) Time: Apply in the spring or early fall when weeds are actively growing. Remarks: Amine formulations. Controls many annual and perennial broadleaf weeds including dandelion, mallow, clover, black medic, chickweed, plantains, prostrate spurge, and other weeds on residential and other turf sites. Caution: Do not apply to newly seeded grasses. Do not apply more than 0.75 lb ae/A on closely mowed bentgrass (putting greens). Do not broadcast apply when air temperature exceeds 85° F. Do not irrigate within 24 hours after application. Do not make more than two broadcast applications per year. Be careful not to exceed specified dosage within the drip line of trees.

2,4-D + 2,4-DP + dicamba (Trimec Super) Rate: 1.1 to 1.7 lbs ae/A Time: Apply in the spring or early fall when weeds are actively growing. Remarks: Ester formulation. Controls dandelion, mallow, clover, black medic, chickweed, plantains, prostrate spurge, and many other broadleaf weeds on residential and other turf sites, excluding sod farms. Apply in 20 to 260 gallons of water per acre. Spot applications may be made at any time during the growing season. Caution: Do not apply to newly seeded grasses. Do not use on bentgrass. Do not apply when air temperature exceeds 85° F. Do not irrigate within 24 hours after application. Do not make more than two broadcast applications per year. Be careful not to exceed specified dosage within the drip line of trees.

MCPA + MCPP + dicamba (Trimec Encore) (Tri-Power) Rate: (Varies by product) Time: Apply in the spring or early fall when weeds are actively growing. Remarks: Amine formulations. Also available in water soluble packets as a dry soluble concentrate (Encore DSC). Does not contain 2,4-D. Controls dandelion, mallow, clover, black medic, chickweed, plantains, prostrate spurge, and many other broadleaf weeds on residential and other turf sites.

NO₃-N from heavily irrigated sandy soil was reported by Rieke and Ellis, (1974), Snyder et al., (1980), and Brown et al., (1977) with as much as 60% of the applied nitrogen being lost. Morton et al., (1988) fertilized home lawns with a NO₃-N source of nitrogen to determine the effect of nitrogen leaching on ground water contamination. Three rates (0, 97, and 244 kg N/ha-yr) of inorganic nitrogen forms and two irrigation treatments were applied to Kentucky bluegrass. Surface runoff and soil water percolate were collected to determine N concentration in the leachate. They found that the mean annual flow weighted concentration of inorganic N in the soil water percolate was below the U.S. drinking water standards on all treatments. Over-watering in conjunction with fertilization generated higher annual flow weighted concentration and mass flow loss than unfertilized controls.

Several researchers described conditions under which substantial amounts of NO₃-N have leached from fertilized cool season turfgrass (Owen and Barraclough, 1983; Rieke and Ellis, 1974). On Long Island, NY, and the southern New England states where permeable outwash soils overlie unconfined drinking water aquifers, NO₃ leaching has been a concern. There, home lawns are typically irrigated with little regard to crop water consumptive use and irrigation requirements. Snyder et al., 1984 reported that in automatically controlled irrigation systems water application rates are usually chosen to meet the highest potential evapotranspiration demand. On days when potential evapotranspiration drops, excess water percolates below the root zone carrying

nitrogen and other nutrients with it.

Koppelman (1987) surveyed 460 households and some lawn companies on Long Island to determine the quantity of nitrogen applied to lawn areas. He found that homeowners apply an average of 122 Kg N ha⁻¹ yr⁻¹ to their lawns. Lawn companies apply 220 to 293 Kg ha⁻¹ yr⁻¹.

Ranja et al., (1992c) showed how best management practices (BMPs) can minimize nitrate leaching without reducing potato yield. They utilized a computer simulation model to predict nitrate leaching for a range of ammonium nitrate fertilization levels. Although their results are preliminary and are based on computer simulations, they concluded that NO₃-N leaching could be reduced without reducing potato crop yield.

CHAPTER III

METHODOLOGY

3.1 Area Discretization

About 42% of the state's population resides in the 500 square-mile Salt Lake Valley (ie within about one percent of the state's total area). The valley has the highest population density in the State.

The Salt Lake Valley ground water reservoir (Figure 1) consists of two unconsolidated aquifer layers of Quaternary Age. In 1985, it provided about 40% of the valley's public water supply (Johnson and Jackson, 1988) and about 22% of the total water use. Most extracted water comes from the principal aquifer along the center and east side of the valley.

Recharge to the principal aquifer comes from subsurface inflows from fractured rocks immediately adjacent to the mountain fronts and by infiltration of surface water. Subsurface inflows contribute about 45% (85,000 to 205,000 acre-feet per year for 1969-82) of the total recharge to the principal aquifer (Figure 2). Surface infiltration through seepage from bedrock, irrigation, precipitation, canals, and creek channels occurs adjacent to the east and west mountains of the valley (Hely et al., 1971). Water infiltrates to the aquifer as it moves across coarse grained deposits having large transmissivity values.

Baskin (1990) identified areas of recharge to the principal aquifer from streams, canals, irrigation, and precipitation (Figure 3). These recharge both the principal and the shallow unconfined aquifers. Waddell et al., (1987) estimated

that about 20% or 72,000 acre-feet of total recharge to both the principal and the shallow unconfined aquifers in Salt Lake Valley comes from seepage from canals and irrigated fields and 20% comes from precipitation.

Figure 1 shows the ground water reservoir underlying Salt Lake Valley discretized into rectangular cells with sides of 1 or 0.7 mile. This is the same discretization used by Waddell et al., (1987) and Gharbi and Peralta (1994). Cells through which the principal aquifer is recharged are identified in Figures 2 and 3. Figure 2 shows areas of subsurface inflow to the principal aquifer from fractured consolidated rocks. Figure 3 shows areas of subsurface inflow from streams, canals, irrigation, and precipitation.

In this study, a metropolitan Salt Lake City map (Appendix C) was obtained and discretized in harmony with Figure 3. Cities that fall in the recharge areas were identified. These include Salt Lake City, Sandy, West Valley, West Jordan, South Jordan, and a small portion of Riverton. Also included are parts of the unincorporated areas of Cottonwood, Cottonwood Heights, Canyon Rim, Millcreek, Holladay, and Kearns and Taylorsville, .

For each study area cell the number and area (acres) was estimated for each of the following categories:

- Parks, golf courses, hospitals, colleges, and schools.
- Churches.
- Residential areas.

Subsequent sections discuss procedures used to obtain information to

Figure 1. Study Area Discretization (Source: Waddell et al., 1987, Gharbi and Peralta 1994, and Peralta et al., 1992)

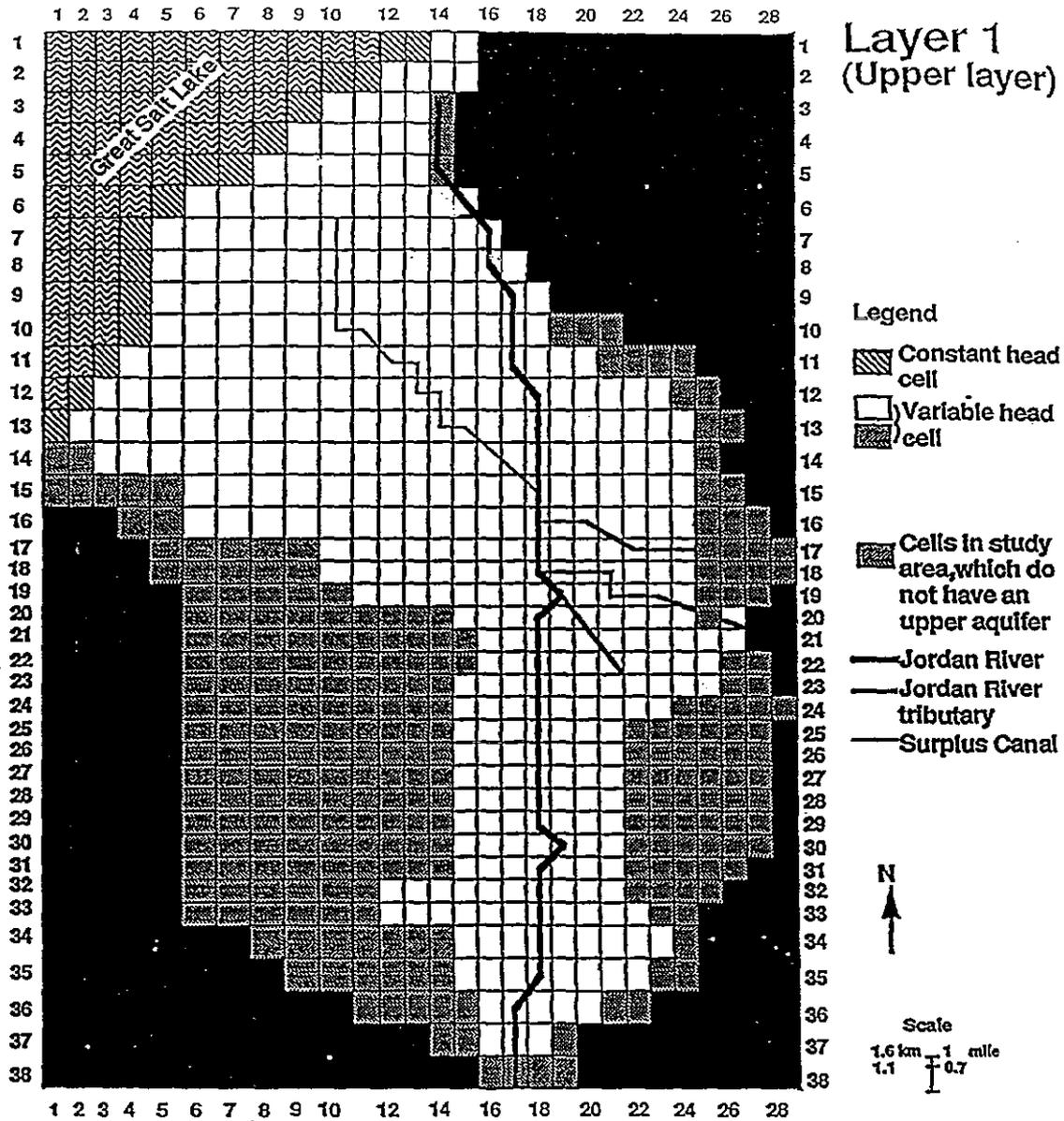


Figure 2. Area of Subsurface Inflow to the Principal Aquifer from Fractured Consolidated Rocks (Source: Waddell et al., 1987)

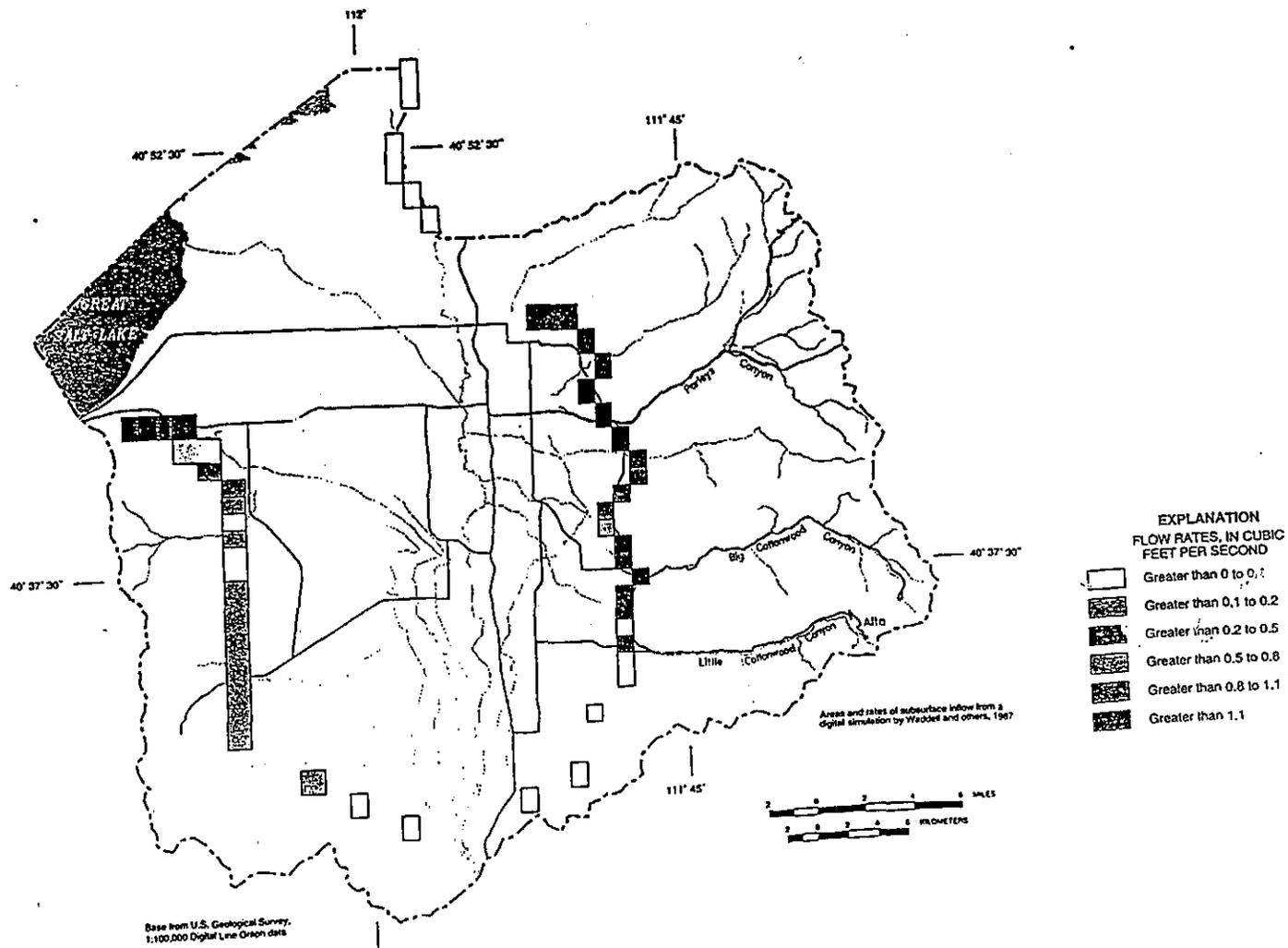
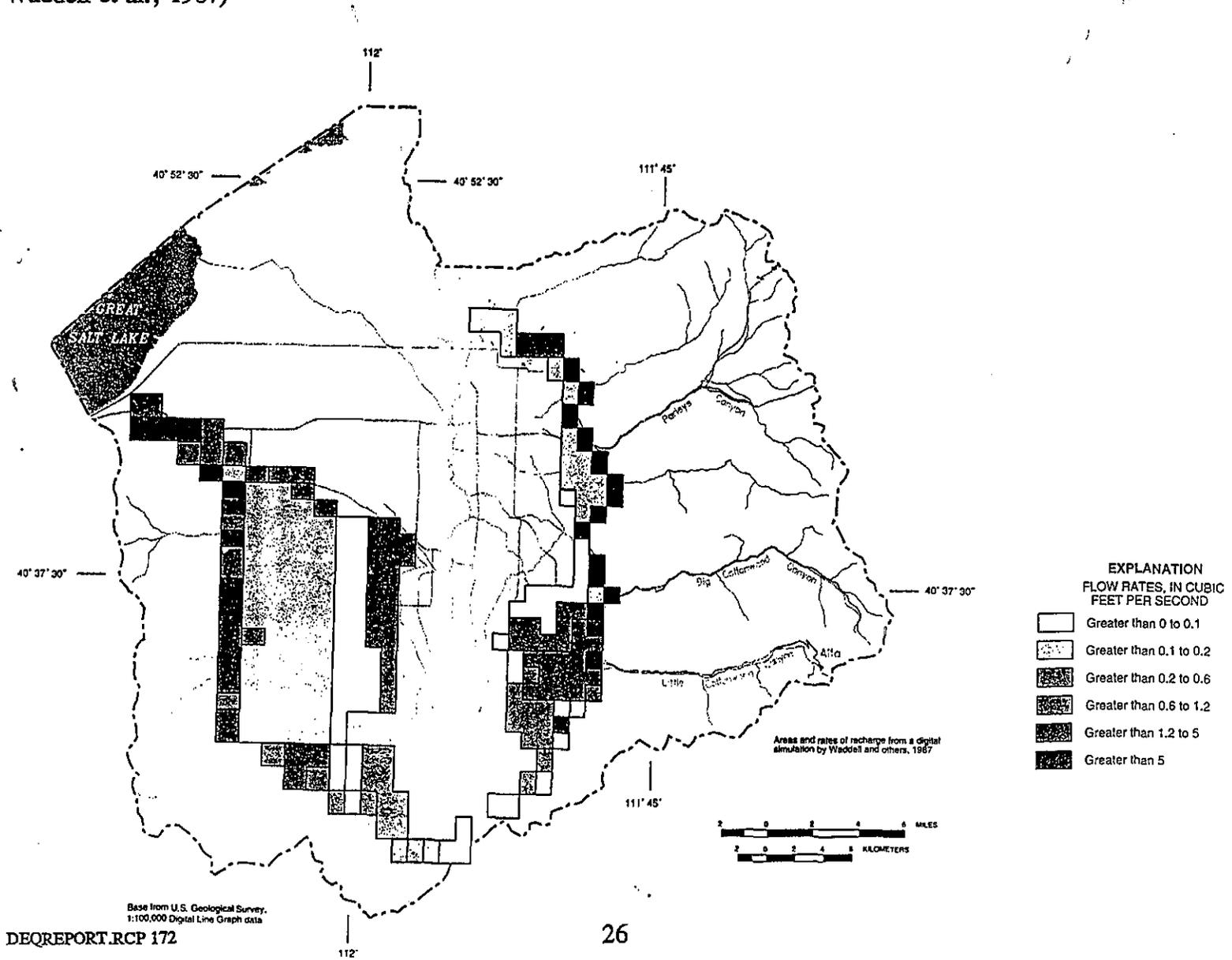


Figure 3. Area of Recharge to the Principal Aquifer from Streams, Canals, Irrigation, and Precipitation (Source: Waddell et al., 1987)



satisfy the project objective. These include survey of government documents, information from schools, churches, golf courses, hospitals, universities, lawncare companies, chemical applicators, and the Utah Department of Transportation. Source of this information are presented in Table 3. Results from the survey are presented in next chapter.

Table 3. Sources of Information for Pesticide Use on Lawns and Turf

1.	Golf Courses	Superintendents of golf courses
2.	Schools	School districts.
3.	Churches	Church survey.
4.	University	University of Utah.
5.	Hospitals	Hospitals survey
6.	Agriculture	<i>Pesticide use on Utah's grain and forage crops.</i> Deer et al., (1993).
7.	Airport	Airport maintenance
8.	Homeowners	Questionnaire.
9.	Parks	County and cities parks departments

3.2 Lawn Area Estimation

Lawn areas in cells overlying the recharge zone of Salt Lake Valley are determined by summing areas from three procedures. The first procedure involves churches and schools. In that procedure, we first obtained the total lawn area of churches and schools in the recharge zone. Estimated total lawn area for churches and schools in the recharge zone are obtained from church sources and school districts respectively. We determine the number of churches and schools in each cell from their listed address. We then determine the total number of

churches and schools in the recharge area. The average area per church and school is then determined. Here we assume that all individual schools and churches have the same area. Determining the exact area for each individual unit was impractical or impossible. The second procedure involves parks, hospitals, colleges, and golf courses. For these, the lawn area of individual units within each cell is determined from the metropolitan city map.

The third procedure involves residential lawn areas. For each cell the percentage residential area excluding churches, parks, schools, hospitals, golf courses, and industrial parts was determined. We toured some residential areas and estimated that 50% of the residential area are lawns in a cell (assuming the other 50% are the buildings and sidewalks).

3.3 Survey of Government Documents

We obtained copies the Utah Fertilizer Act, the Utah Pesticide Control Act and the rule pertaining to the Utah Pesticide Control Act from the Utah Department of Agriculture. We also obtained copies of the Federal Insecticide, Fungicide, and Rodenticide Act as Amended (FIFRA). These are all discussed in the next chapter.

3.4 Survey of Applicators and Lawncare companies to Determine Type, Amount, and Frequency of Lawn Chemical Application

We obtained a list of licensed pesticide applicators from the Utah Department of Agriculture (Appendix A). Applicators are divided into two types;

commercial and noncommercial. Appendix A lists commercial and non-commercial licensed applicators.

Applicators listed in Appendix A can apply chemicals throughout the State of Utah. They might or might not be applying chemicals in areas within the Salt Lake Valley recharge zone. Some are employed by lawncare companies. Some might not be applying any chemicals. To survey all listed individuals is beyond the scope and budget of this project. Therefore, we selected and interviewed a random sample.

We selected a number of lawncare companies which have contracts with homeowners, parks, or others in Salt Lake Valley. These large businesses are responsible for maintaining lawns in a large portion of the valley.

3.5 Information from Parks, Churches, Schools, and Recreational Areas

City park maintenance information is obtained from the parks department of that city (Table 3). School lawn maintenance information is obtained from the respective school district. Golf course maintenance information is obtained from golf course superintendents. Because of their intended use, golf courses usually receive more attention than other lawn areas in the valley.

3.6 Information from Homeowners in Salt Lake Valley

Due to time and money constraints we surveyed only 50 representative homeowners in the recharge areas. The sample includes homes throughout the recharge area. The homeowners were asked to complete a questionnaire on

vegetation grown and type, rate, and frequency of fertilizers and pesticides applied to vegetation (Figure 4).

3.7 Information from the Utah Department of Transportation

To obtain information concerning freeway turf, we interviewed Mr. Ira Bickford, the supervisor for highway turf maintenance, in Utah Department of Transportation.

Figure 4. Sample of a Questionnaire Given to Homeowners

SURVEY OF HORTICULTURE PRACTICES

Name _____

Address _____

(city) _____ (state) _____ (zip) _____

Phone _____

Fertilizer applied (names).

Crops applied to.

Number of applications per year.

Amount applied per 1000 sq. foot.

Insecticides applied (names).

Crops applied to.

Number of applications per year.

Application rate.

Square feet treated.

Figure 4 (cont)

Herbicide applied (names).

Crops applied to.

Number of applications per year.

Application rate.

Square feet treated.

Fungicides applied (names).

Crops applied to.

Number of applications per year.

Application rate.

Square feet treated.

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Area Discretization

Appendix C shows a Salt Lake City metropolitan map discretized in harmony with Figure 1. Recharge to the principal aquifer occurs through cells overlying Salt Lake city, Sandy, Riverton, Draper, South Jordan, West Jordan, West Valley, and some unincorporated areas in eastern and western Salt Lake Valley.

4.2 Lawn Area Estimation

Areas of schools, churches, hospitals, golf courses, the University of Utah, the airport, and residential homes are shown by cell in Tables 4-12.

4.3 Survey of Government Documents

Appendix B contains a copy of the Utah Fertilizer Act (Title 4 chapter 13). Section 4-13-3 requires that each brand and grade of commercial fertilizer or soil amendment be registered before product distribution. Section 4-13-4 requires special labeling instructions for specialty fertilizers. Sections 4-13-5, 4-13-6, and 4-13-7 deal with inspection, distribution, and commercial value of commercial fertilizers. The amount, type, and rate of fertilizer application is not addressed in this law.

Chapter 14 of the Utah Pesticide Control Act (Appendix B) defines terms, registration requirements for distribution, fees, labeling requirements, issuance

of experimental use permits, enforcement, and inspections. Regulations for pesticide usage differ from those of fertilizers. No person is allowed to apply pesticides for commercial purpose in this state without a license. Moreover, pesticide labels should contain more details than fertilizer labels (section 4-14-4).

The Federal Insecticide, Fungicide, and Rodenticide Act as Amended (FIFRA, 1988) regulates marketing, use, and transportation of pesticides. It regulates pesticide registration and re-registration, experimental use permits, administrative review, records, and other related issues. It lists unlawful acts and penalties for violating any provision in the act. Appendix B contains a copy of selected sections (sections 12 and 14) of FIFRA.

4.4 Survey of Applicators and Lawncare Companies to Determine Type, Amount, and Frequency of Lawn Chemical Application

It was difficult to obtain detailed information from professional lawn chemical applicators surveyed in Salt Lake Valley. Applicators and lawncare companies usually fear that publicizing this information might benefit their competitors and adversely affect their business.

Although lawncare companies and applicators regard information concerning their chemical application practices as confidential we were able to obtain information from some. They indicated that approximately 50% of residential lawn areas in Salt Lake Valley are professionally maintained. They apply 120-240 lb/ac-yr of nitrogen and 2 lb-ai/ac-yr of 2,4-D, dicamba, or others 2-4 times a year. They also apply insecticides when necessary. They estimated

that 5.6% of the total lawn area they treated received diazinon, sevon, or others following label instructions.

4.5 Information from Parks, Churches, Schools, and Recreational Areas

Information concerning parks, schools, churches, and other lawn areas are presented by cell (refer to Appendix C for area discretization) in Tables 4-9. These tables list the lawn area of each unit and the type, rate, and frequency of fertilizers and pesticides applied to lawns. Table 4 identifies cells where schools (elementary schools, high schools, and others) are located. Table 5 shows cells having parks, and Table 6 gives similar information on golf courses. Tables 7-9 address the hospitals, University of Utah golf course, and a second airport (west Salt Lake), respectively.

Every cell in the recharge area contains at least 3 churches. The estimated lawn area of all churches in the recharge zone is 500 acres. Assuming all churches are equal in size the lawn area of each church averages 2.5 acres. Churches use herbicides MCPP and dicamba at 1.5 lb-ai/yr-ac. They use liquid nitrogen fertilizer. They do not use fungicides. They only use insecticides as spot treatment. Total lawn area and total herbicides applied to churches in each cell are shown in Table 10.

A large portion of the west side of the Salt Lake Valley is under agricultural production. These are cells W5, W6, W8, W9, W15, W16, W23, W24, W31, W38-W39, W45-W48, W52-W55, W59-W63, W66-W70, W73-W76, and W80-W82. Some cells have both agricultural and residential land. In

agricultural areas, unirrigated (dry) wheat or grain are the main crop. Pesticides recommended for use on these crops are shown in Table 11.

4.6 Information from Homeowners in Salt Lake Valley

In the recharge zone, approximately 50% of the homes are privately maintained. Results of the survey (questionnaire) showed that homeowners apply an average of 120 lb/ac-yr nitrogen on their lawns. Few surveyed do not apply any fertilizers. The survey also showed that homeowners use 2,4-D, MCP, or dicamba at 2 lb-ai/ac-yr 1-4 times per year. Table 12 lists total fertilizers and herbicides used on home lawns in each cell in the recharge zone.

Results from the survey also indicated that some homeowners apply diazinon as spot insecticide treatment. They indicated that they follow label instructions. No respondent apply fungicides.

4.7 Information from the Utah Department of Transportation

Two highways cross cells overlying the recharge area. These cells are E13, E15, E16, E17, E21, E25, E27, E31, E33, E34, E35, E36, and E37. According to Mr. Bickford, turf near Utah highways is maintained using the least possible amounts of chemicals. To avoid pollution most weed control is done mechanically. Except for occasional spot treatments no insecticides and fungicides are applied. Fertilization is applied as necessary.

Table 4. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to Schools in Salt Lake Valley^a.

Cell	Number of schools	Estimated Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E4	3	45	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E6	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E10	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E12	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E13	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E16	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E17	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E18	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E20	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E21	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E23	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

^a No insecticides or fungicides are applied. The area of each school is estimated as total area of schools in the recharge zone divided by the number of schools.

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicide			Fertilizer		
			Type	Rate	Frequency	Type	Rate	Frequency
E24	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E25	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E26	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E27	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E29	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E35	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E35	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E39	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E40	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E41	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicide			Fertilizer		
			Type	Rate	Frequency	Type	Rate	Frequency
E42	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E44	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E46	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E47	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E50	3	45	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E51	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E53	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E55	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E61	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E63	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E65	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E69	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E70	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E71	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E72	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E73	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E75	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E76	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E77	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E82	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E83	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E86	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E87	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E88	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
E91	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W2	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W3	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W4	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W6	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W7	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W11	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W13	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W14	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
W17	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W18	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W19	3	45	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W24	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W25	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W26	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W27	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W30	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W33	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W36	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 4 (CONT.)

Cell	Number of schools	Estimated Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
W37	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W51	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W58	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W65	2	30	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)
W76	1	15	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr	Nitrogen	120 lb/ac-yr	Twice/yr (S,F)

Table 5. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to Parks in Salt Lake Valley^b.

Cell	# of Parks	Est. Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E7	1	48	2,4-D, Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E17	1	26.4	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E27	1	31.0	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E40	1	16.3	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E41	1	13.5	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E42	1	15.5	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E48	1	58.2	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E50	1	21	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E54	1	19	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E55	1	9.7	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E56	1	11.64	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)

^b No insecticides or fungicides are applied to parks. Area of parks per cell is computed.

Table 5 (CONT.)

Cell	# of Parks	Est. Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E59	1	3.5	2,4-D, Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E61	1	11.6	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E67	1	34.	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E68	1	4.7	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E71	1	10.5	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E72	1	7	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E73	2	13.3	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E74	2	2.3	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
E87	1	8.0	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W4	1	5.8	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W14	1	9.7	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W19	1	46.5	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)

Table 5 (CONT.)

Cell	# of Parks	Est. Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
W20	1	46.5	2,4-D, Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W21	1	70	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W25	1	38.8	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)
W26	1	37.2	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	80-100 lb/ac-yr	Twice (S,F)

Table 6. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to Golf Courses in Salt Lake Valley^c.

Cell	# of GC	Est. Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E11	1	384	2,4-D, Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
E14	1	269	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
E49	1	93	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
W9	1	203.7	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
W10	1	48.9	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
W16	1	291	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo
W17	1	97	2,4-D Products. (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	250 lb/ac-yr	Once/mo

^c Insecticides are applied on 5 acres of golf courses only. 32 fl oz/acre Dirsban is applied. Fungicides are applied only as spot treatment when needed.

Table 7. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to Hospitals in Salt Lake Valley^d.

Cell	# of Hosp	Est. Area (ac)	Herbicides			Fertilizers		
			Type	Rate	Frequency	Type	Rate	Frequency
E1	1	13	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	160 lb/ac-yr	2-4 times/yr
E4	1	13	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	160 lb/ac-yr	2-4 times/yr
E8	1	13	2,4-D Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	160 lb/ac-yr	2-4 times/yr

Table 8. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to University of Utah Golf Course in Salt Lake Valley^e.

Cell	Est. Area Acre	Herbicides			Fertilizers		
		Type	Rate	Frequency	Type	Rate	Frequency
E7	400	2,4-D, Products (ex. Trimec)	2 lb ai/ac-yr	Twice/yr (S,F)	Nitrogen	120 lb/ac-yr	Twice/yr

^d Insecticides are applied as spot treatment only. No fungicides are applied.

^e No insecticides or fungicides are applied.

Table 9. Fertilizers, Herbicides, Insecticides, and Fungicides Applied to Municipal Airport on the West Side of Salt Lake Valley^f.

Cell	Est. Area Acre	Herbicides			Fertilizers		
		Type	Rate	Frequency	Type	Rate	Frequency
W34	14	None		None		60 lb/ac-yr	Once
W35	23	None		None		60 lb/ac-yr	Once
W41	50	None		None		60 lb/ac-yr	Once
E42	125	None		None		60 lb/ac-yr	Once
W43	38	None		None		60 lb/ac-yr	Once
W48	38	None		None		60 lb/ac-yr	Once
W49	152	None		None		60 lb/ac-yr	Once
W50	1144	None		None		60 lb/ac-yr	Once
W55	17	None		None		60 lb/ac-yr	Once
W56	9	None		None		60 lb/ac-yr	Once
W57	25	None		None		60 lb/ac-yr	Once

^f No insecticides or fungicides are applied.

Table 10. A)- Lawn Area (acres) and, B)- Amount of Herbicides Applied to Churches in Each Cell (lb-ai/yr)^g

A. Lawn Area in Each cell (ac)

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0		8	8	8	8	8	8	8	8	8
	1	8	8	8	8	8	8	8	8	8	8
	2	8	8	8	8	8	8	8	8	8	8
	3	8	8	8	8	8	8	8	8	8	8
	4	8	8	8	8	8	8	8	8	8	8
	5	8	8	8	8	8	8	8	8	8	8
	6	8	8	8	8	8	8	8	8	8	8
	7	8	8	8	8	8	8	8	8	8	8
	8	8	8	8	8	8	8	8	8	8	8
	9	8	8								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0		8	8	8	8	8	8	8	8	8
	1	8	8	8	8	8	0	0	8	8	8
	2	8	8	8	0	8	8	8	8	8	8
	3	8	0	8	8	8	8	8	8	0	0
	4	8	8	8	8	8	0	0	8	8	0
	5	8	8	0	0	0	0	0	8	8	0
	6	0	8	8	0	8	8	0	0	0	8
	7	8	8	8	0	0	8	0	8	8	8
	8	0	0	0	8	8	8	8	8	8	8
	9	0	0	8	8						

^g Column number in the table represents the ones digit and row number represents the tens digit of cell in Appendix C. For example, row 2 column 8 in the table is cell 28 in Appendix C.

B. Amount of Herbicides Applied in Each Cell (lb-ai/yr)

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0		11	11	11	11	11	11	11	11	11
	1	11	11	11	11	11	11	11	11	11	11
	2	11	11	11	11	11	11	11	11	11	11
	3	11	11	11	11	11	11	11	11	11	11
	4	11	11	11	11	11	11	11	11	11	11
	5	11	11	11	11	11	11	11	11	11	11
	6	11	11	11	11	11	11	11	11	11	11
	7	11	11	11	11	11	11	11	11	11	11
	8	11	11	11	11	11	11	11	11	11	11
	9	11	11								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0		11	11	11	11	11	11	11	11	11
	1	11	11	11	11	11	0	0	11	11	11
	2	11	11	11	0	11	11	11	11	11	11
	3	11	0	11	11	11	11	11	11	0	0
	4	11	11	11	11	11	0	0	11	11	0
	5	11	11	0	0	0	0	0	11	11	0
	6	0	11	11	0	11	11	0	0	0	11
	7	11	11	11	0	0	11	0	11	11	11
	8	0	0	0	11	11	11	11	11	11	11
	9	0	0	11	11						

Table 11. Recommended Pesticide Use on Dryland Wheat and Barley in Salt Lake County (Deer et al., 1993)

Crop Pests	Target Type	Pesticides Rate	Application Date	Application	Form.
Dryland Wheat or Barley	Mustards	2,4-D/H	0.24-0.95	May 10	E or SC
	Broadleafs Grasses	Chlors- ulfuron/H	0.01-0.02	May 14	DF
	Russian Wheat Aphids	Disulfoton/I	1.0	As Needed	E or G

Table 12. A)- Lawn Area (acres), B)- Amount of Fertilizers Applied to Home Lawns in Each Cell (lb/yr), and C)- Amount of Herbicides Applied in Each Cell (lb-ai/yr)^h

A. Lawn Area in Each Cell (ac)

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows	0		67	112	45	224	224	67	90	34	34
(Tens	1	179	4	224	134	134	224	224	170	141	141
Digit)	2	141	157	157	157	157	157	157	157	157	141
	3	94	47	47	16	110	110	110	110	16	16
	4	31	63	110	157	157	157	141	157	78	16
	5	157	157	157	157	157	157	157	78	78	157
	6	141	157	157	157	110	157	47	125	125	157
	7	3	157	110	141	78	125	94	151	110	38
	8	38	94	97	125	125	31	141	141	125	224
	9	45	45								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows	0		54	67	134	179	11	54	179	0	0
(Tens	1	54	125	151	110	125	0	0	179	125	141
Digit)	2	135	135	110	0	54	54	38	157	125	141
	3	141	0	45	112	78	110	94	78	0	0
	4	157	47	9	110	110	0	0	9	9	0
	5	47	157	0	0	0	0	0	47	47	0
	6	0	18	38	0	38	38	0	0	0	13
	7	13	78	16	0	0	22	0	31	63	38
	8	0	0	0	38	94	38	16	38	16	16
	9	0	0	4	31						

^h Column number in the table represents the ones digit and row number represents the tens digit of cell in Appendix C. For example, row 2 column 8 in the table is cell 28 in Appendix C.

B. Fertilizers Applied to Home Lawns in Salt Lake Valley (lb/yr)

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
0			10	18822	7529	37644	37644	11293	15058	5647	5647
1		30115	753	37644	22586	22586	37644	37644	28609	23716	23716
2		23716	26351	26351	26351	26351	26351	26351	26351	26351	23716
3		15810	7905	7905	2635	18446	18446	18446	18446	2635	2635
Rows	4	5270	10540	18446	26351	26351	26351	23716	26351	13175	2635
(Tens	5	26351	26351	26351	26351	26351	26351	26351	13175	13175	26351
Digit)	6	23716	26351	26351	26351	18446	26351	7905	21081	21081	26351
	7	527	26351	18446	23716	13175	21081	15810	25297	18446	6324
	8	6324	15810	16338	21081	21081	5270	23716	23716	21081	37644
	9	7529	7529								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
0			9035	11293	22586	30115	1882	9035	30115	0	0
1		9035	21081	25297	18446	21081	0	0	30115	21081	23716
2		22662	22662	18446	0	9035	9035	6324	26351	21081	23716
3		23716	0	7529	18822	13175	18446	15810	13175	0	0
Rows	4	26351	7905	1581	18446	18446	0	0	1506	1506	0
(Tens	5	7905	26351	0	0	0	0	0	7905	7905	0
Digit)	6	0	3012	6324	0	6324	6324	0	0	0	2108
	7	2108	13175	2635	0	0	3764	0	5270	10540	6324
	8	0	0	0	6324	15810	6324	2635	6324	2635	2635
	9	0	0	753	5270						

C. Herbicides Applied to Home Lawns in Salt Lake Valley (lb-ai/yr)

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0	134	224	90	448	448	134	179	67	67	
	1	359	9	448	269	269	448	448	341	282	282
	2	282	314	314	314	314	314	314	314	314	282
	3	188	94	94	31	220	220	220	220	31	31
	4	63	125	220	314	314	314	282	314	157	31
	5	314	314	314	314	314	314	314	157	157	314
	6	282	314	314	314	220	314	94	251	251	314
	7	6	314	220	282	157	251	188	301	220	75
	8	75	188	194	251	251	63	282	282	251	448
	9	90	90								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0	108	134	269	359	22	108	359	0	0	
	1	108	251	301	220	251	0	0	359	251	282
	2	270	270	220	0	108	108	75	314	251	282
	3	282	0	90	224	157	220	188	157	0	0
	4	314	94	19	220	220	0	0	18	18	0
	5	94	314	0	0	0	0	0	94	94	0
	6	0	36	75	0	75	75	0	0	0	25
	7	25	157	31	0	0	45	0	63	125	75
	8	0	0	0	75	188	75	31	75	31	31
	9	0	0	9	63						

Table 13. A)- Total fertilizers (lb/yr) and B)- Total Herbicides Applied to Each Cell (lb-ai/yr) in the Recharge Area¹.

A. Total Fertilizers Applied in Each Cell

East Salt Lake

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows	0		13373	18822	7529	45124	37644	13093	67378	7567	5647
(Tens	1	31915	96753	39444	24386	89836	37644	39444	32785	27316	23716
Digit)	2	27316	28151	26351	28151	28151	29951	29951	30941	26351	25516
	3	15810	7905	7905	2635	18446	20246	20246	18446	2635	4435
	4	8537	13555	21641	26351	28151	26351	25516	28151	18413	25885
	5	33641	28151	26351	28151	28061	29024	27398	13175	13175	26666
	6	23716	29195	26351	28151	18446	28151	7905	24141	21504	28151
	7	2327	29096	20876	26713	13382	22881	17610	27097	18446	6324
	8	6324	15810	18138	22881	21081	5270	25516	26236	22881	37644
	9	7529	9329								

West Salt Lake Valley

		Columns (Ones digit)									
		0	1	2	3	4	5	6	7	8	9
Rows	0		9035	13093	22586	32437	1882	10835	33715	0	18333
(Tens	1	13436	22881	25297	20246	23754	0	26190	42445	22881	33301
Digit)	2	26847	28962	18446	0	10835	16127	11472	28151	21081	23716
	3	25516	0	7529	20622	14015	19826	17610	14975	0	0
	4	26351	10905	9081	20726	18446	0	0	1506	3786	9120
	5	76545	28151	0	0	0	1020	540	9405	9705	0
	6	0	3012	9924	0	6324	6324	0	0	0	2108
	7	2108	13175	2635	0	0	3764	1800	5270	10540	6324
	8	0	0	0	6324	15810	6324	2635	6324	2635	2635
	9	0	0	753	5270						

ⁱ Column number in the table represents the ones digit and row number represents the tens digit of cell in Appendix C. For example, row 2 column 8 in the table is cell 28 in Appendix C.

B. Total Pesticide Applied in Each Cell

East Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens digit)	0		160	224	90	564	448	164	1075	91	67
	1	389	777	478	299	807	448	478	423	342	282
	2	342	344	314	344	344	374	374	406	314	312
	3	188	94	94	31	220	250	250	220	31	61
	4	125	182	281	314	344	314	312	344	273	217
	5	446	344	314	344	352	363	337	157	157	321
	6	282	367	314	344	220	344	94	319	260	344
	7	36	365	264	339	161	281	218	331	220	75
	8	75	188	224	281	251	63	312	328	281	448
	9	90	120								

West Salt Lake Valley

		Columns (Ones Digit)									
		0	1	2	3	4	5	6	7	8	9
Rows (Tens Digit)	0		108	164	269	400	22	138	419	0	07
	1	205	281	301	250	300	0	582	613	281	465
	2	363	410	220	0	138	245	180	344	251	282
	3	312	0	90	254	157	220	218	187	0	0
	4	314	94	19	220	220	0	0	18	18	0
	5	94	344	0	0	0	0	0	94	124	0
	6	0	36	135	0	75	75	0	0	0	25
	7	25	157	31	0	0	45	30	63	125	75
	8	0	0	0	75	188	75	31	75	31	31
	9	0	0	9	63						

CHAPTER V

VI. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary and Conclusion

We performed surveys in 1993-94 to estimate application of chemicals (fertilizers and pesticides) to lawns in the recharge zone overlying the principal aquifer of Salt Lake Valley. We surveyed homeowners, lawncare companies, and others about the type, amount, and frequency of fertilizers and pesticides applied to lawns. We also surveyed and interviewed as necessary to estimate the amounts of pesticides and fertilizers applied to golf courses, hospitals, schools, parks, and other recreational areas.

Results indicate that herbicides and nitrogen fertilizers are the most common chemicals applied to the recharge areas in Salt Lake valley. All groups apply non foliar nitrogen fertilizer. Surveyed churches use MCPP and foliar fertilizers. All groups use insecticides and fungicides as spot treatment.

Frequency of application differed between different groups. Golf courses apply more frequently (almost every month) than others. Homeowners apply chemicals 2-4 times a year. Schools, parks, and other recreational areas apply chemicals twice a year (note that the turf growing season in Salt Lake Valley begins in April-May and ends in September-October).

Efforts to manage nonpoint source pollution require knowledge of the amount, type and frequency of chemical application. By providing such information, this study is a first step for future efforts.

5.2 Recommendations

As a result of this study the following are recommended.

1. A field demonstration should be conducted to determine under natural conditions the half-

life and partitioning coefficient of applied chemicals (ex: Trimec and 2,4-D) to lawn areas in Salt Lake Valley. These parameters are fairly site specific. The literature contains a wide range of values for these parameters for different parts of the country. To date, no such data has been reported specifically for Utah or Salt lake Valley.

2. A field experiment should be conducted to monitor nitrogen fate in the vadose zone as a result of water application under natural Salt Lake Valley conditions.

3. A pesticide and nitrate simulation model should be calibrated against field data. This model will then be applied to sites where the potential for leaching to ground water is highest.

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APPENDICES

APPENDIX A

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	9885	GREGORY C. ABBOTT APHIS 1860 W ALEXANDER ST #B WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 4/13/93 Renew: 1/03/94 Expires: 12/31/94	4/13/93 4/13/93 12/31/95	6 9		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	3393	DONALD ADAM WASATCH EXTERMINATORS 3839 RIDGE CREST DR KEARNS, UT 84118	Ph: County: 18	New: 5/05/86 Renew: 2/18/94 Expires: 12/31/94	12/21/93 12/31/96	7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3896	CHARLES F. ADAMS ADAMS LAWN SPRAYING 3151 GREEN SALT LAKE CITY, UT 84106	Ph: 486-1268 County: 18	New: 3/21/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	8790	DAN S. ADAMS 1769 FAUNSDALE SANDY, UT 84092	Ph: 944-9336 County: 18	New: 4/04/89 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9468	RONALD K. ADAMS 4194 W 5200 S LAKESHORE, UT 84660	Ph: County: 25	New: 2/24/92 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 5		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9187	LARRY CURTIS ADKINS SLC PARKS & RECREATION 1332 W 4505 S MURRAY, UT 84123	Ph: 269-9173 County: 18	New: 12/21/90 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9940	BRENT AHLANDER SLC PARKS DEPT 1805 E 3300 S SALT LAKE CITY, UT 84106	Ph: 485-3790 County: 18	New: 9/30/93 Renew: 1/03/94 Expires: 12/31/94	9/30/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9897	GARY K. ALLEN U OF U GROUNDS DEPT 333 DOUGLAS ST #1 SALT LAKE CITY, UT 84102	Ph: County: 18	New: 6/22/93 Renew: 1/04/94 Expires: 12/31/94	6/22/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	2420	PATRICK J. ALLEN CHEM LAWN 636 E CALNETTE DR SANDY, UT 84070	Ph: County: 18	New: 4/01/84 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3434	STEPHEN A. ALLEN LAWN FITNESS 8421 S 150 E SANDY, UT 84070	Ph: County: 18	New: 5/29/86 Renew: 1/04/94 Expires: 12/31/94	4/07/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	8958	TAMRA ALLEN 6842 W 3710 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 12/29/89 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	3 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5168	JIM ANDERSON ANDERSON CUSTOM LAWN 7976 S 3685 W WEST JORDAN, UT 84088	Ph: County: 18	New: 3/02/93 Renew: 2/18/94 Expires: 12/31/94	3 3/02/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4934	KRIS ANDERSON STEWARTS 210 E 1100 S OREM, UT 84058	Ph: County: 25	New: 3/19/92 Renew: 1/04/94 Expires: 12/31/94	3 10/05/93 12/31/95		DAY, DON
Duly Licensed As A Commercial Pesticide Applicator							
4001	3188	LADD ANDERSON PO BOX 171165 SALT LAKE CITY, UT 84117-1165	Ph: County: 18	New: 7/01/85 Renew: 1/04/94 Expires: 12/31/94	3 6 7 3/25/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5491	LYNN H. ANDERSON TURF PLUS 572 E 700 N AMERICAN FORK, UT 84003	Ph: 756-8463 County: 25	New: 2/24/94 Renew: 3/11/94 Expires: 12/31/94	3 2/24/94 12/31/96		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator							
4001	5169	ROGER ANDERSON 3747 S 8200 W MAGNA, UT 84044	Ph: County: 18	New: 2/09/93 Renew: 1/02/94 Expires: 12/31/94	3 2/09/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5164	STEVE ANDERSON TURF PLUS 60 S 200 E SPRINGVILLE, UT 84663	Ph: County: 25	New: 3/10/93 Renew: 1/04/94 Expires: 12/31/94	3 3/10/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	4508	COREY ANDRA CLA WATER PROOFING 2601 W 4940 S SALT LAKE CITY, UT 84118	Ph: County: 18	New: 6/05/90 Renew: 1/02/94 Expires: 12/31/94	7 1/01/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9893	MICHAEL T. ANTES USFS 9506 GRANDVIEW DR SANDY, UT 84092	Ph: County: 18	New: 6/17/93 Renew: 1/03/94 Expires: 12/31/94	2 6 6/17/93 12/31/95		WILSON
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9390	DONALD L. ARCHER WILDLIFE RESOURCES 2972 SCANDIA WAY SANDY, UT 84093	Ph: 538-4817 County: 18	New: 6/20/91 Renew: 1/28/94 Expires: 12/31/96	5 12/21/93 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5500	JASON ARCHULETA WEED FREE 555 N 500 W #19 PAYSON, UT 84651	Ph: 465-1915 County: 25	New: 2/07/94 Renew: 3/18/94 Expires: 12/31/94	3 7 2/07/94 12/31/96		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator							
4001	5501	DAVE ARMSTRONG ARTISTIC OUTDOORS LANDSCA 6595 S GREEN MEADOW WAY 1 MURRAY, UT 84107	Ph: 264-1823 County: 18	New: 3/01/94 Renew: 3/11/94 Expires: 12/31/94	3 3/01/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	3449	BRENT G. ARNOLD UTAH POWER & LIGHT 9638 S PRINCESS CIR SOUTH JORDAN, UT 84095	Ph: 254-5790 County: 18	New: 7/02/86 Renew: 2/11/94 Expires: 12/31/94	1/11/94 12/31/96	3 6	CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	9966	TODD ASAY SANDY CITY PARKS 1048 W RANCH PARK DR WEST JORDAN, UT 84088	Ph: 568-2820 County: 18	New: 2/01/94 Renew: 2/11/94 Expires: 12/31/96	2/01/94 12/31/96	3	CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4257	STEVEN AUGADE 3678 BRIGHTON POINT DR SALT LAKE CITY, UT 84121	Ph: County: 18	New: 8/25/89 Renew: 1/04/94 Expires: 12/31/94	3/23/93 12/31/95	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5174	JONATHAN ANDREW BAILEY BUFFO'S 920 S SAGE CREEK CR SPRINGVILLE, UT 84663	Ph: County: 25	New: 3/16/93 Renew: 1/28/94 Expires: 12/31/94	3/16/93 12/31/95	3 7	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	9805	CALVIN BAKER USDA FOREST SERVICE 151 N 200 E LINDON, UT 84042	Ph: County: 25	New: 4/08/93 Renew: 1/03/94 Expires: 12/31/94	4/08/93 12/31/95	2 6 12	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9950	TROY BAKER SLC PARKS & RECREATION 1965 W 500 S SALT LAKE CITY, UT 84104	Ph:801 322-1629 County: 18	New: 11/09/93 Renew: 1/28/94 Expires: 12/31/94	11/09/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5306	HOWARD BALL ORKIN 355 E 4140 S #176 SALT LAKE CITY, UT 84170	Ph: County: 18	New: 5/07/93 Renew: 1/04/94 Expires: 12/31/94	5/17/93 12/31/95	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5369	STUART A. BARRUS 6366 S MOKI CIR WEST JORDAN, UT 84084	Ph:801 963-0941 County: 18	New: 7/20/93 Renew: 1/04/94 Expires: 12/31/94	7/20/93 12/31/95	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4873	DALE BARTHOLOMEW 875 E CENTER SPRINGVILLE, UT 84663	Ph: County: 25	New: 2/24/92 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	8023	MICHEAL BARTHOLOMEW SPRINGVILLE CITY CORP 208 S 200 W SPRINGVILLE, UT 84663	Ph: 489-9256 County: 25	New: 1/21/86 Renew: 1/02/94 Expires: 12/31/96	12/08/93 12/31/96	3 12	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3086	BRYAN RAY BARTON LAWNLIFE 871 CEDAR TERRACE SANDY, UT 84094	Ph: County: 18	New: 5/01/85 Renew: 2/25/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	2782	STERLING L. BASCOM 649 N 800 W OREM, UT 84057	Ph: County: 25	New: 4/01/84 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	1 3 7 9 10 12		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4823	JOHN M. BASS LAWN MASTER, INC. PO BOX 817 MIDVALE, UT 84047	Ph: County: 18	New: 1/04/92 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2273	KENT G. BATEMAN 1255 W 6850 S WEST JORDAN, UT 84084	Ph: County: 18	New: 7/01/83 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	1 5 6		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5280	DAVID A. BATH LAWN TECH 814 GERMANIA AVE MURRAY, UT 84123	Ph: County: 18	New: 5/04/93 Renew: 1/04/94 Expires: 12/31/94	5/04/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1009	DONALD Z. BATIE DAVEY TREE EXPERT CO. 5719 S BENNION DR SALT LAKE CITY, UT 84118	Ph: 969-0661 County: 18	New: 3/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3 6 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9584	KEVIN L BECK UT DIVISION OF WILDLIFE 425 S 1250 E PLEASANT GROVE, UT 84062	Ph: County: 25	New: 3/31/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	9		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5488	BARRET K. BELANIO ARTISTIC OUTDOORS CO 1882 S W TEMPLE #150-D SALT LAKE CITY, UT 84115	Ph: 485-8131 County: 18	New: 2/15/94 Renew: 3/11/94 Expires: 12/31/94	2/15/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	7674	BREK BENNETT SLC MOSQUITO 3397 TERRACE VIEW DR SALT LAKE CITY, UT 84109	Ph: County: 18	New: 6/01/84 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5175	DAVID L. BENNETT DAVEY TREE 467 S 500 E PROVO, UT 84606	Ph: County: 25	New: 2/25/93 Renew: 1/04/94 Expires: 12/31/94	2/25/93 12/31/95			COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	9683	JAMES F. BENNETT SLC/COUNTY HEALTH DEPT 8720 S OAKWOOD PARK CIR SANDY, UT 84094	Ph: County: 18	New: 12/15/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9744	PHILIP J. BENNETT CENTRAL UT WATER CONSERVA 225 S 600 E ALPINE, UT 84004	Ph: County: 25	New: 3/09/93 Renew: 1/02/94 Expires: 12/31/94	3/09/93 12/31/95	6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9198	SHANE D BENNETT SOUTH JORDAN CITY PARKS 11175 S REDWOOD RD SOUTH JORDAN, UT 84065	Ph: County: 18	New: 12/19/90 Renew: 1/03/94 Expires: 12/31/94	3 5 12 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9189	BRIAN BENNION SLC/CO. HEALTH 1206 W CODY CIR SOUTH JORDAN, UT 84065	Ph: County: 18	New: 12/21/90 Renew: 1/01/94 Expires: 12/31/94	1/01/93 8 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7561	PAUL G. BERGANTZ WEST BOUNTIFUL CITY GOLF 5556 S 2200 W SALT LAKE CITY, UT 84118	Ph: 969-2711 County: 18	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	3 8 12 12/31/94		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5129	LEE BETHERS BETHERS LAWN CARE 334 N 200 E OREM, UT 84057	Ph: County: 25	New: 1/15/93 Renew: 1/03/94 Expires: 12/31/94	3 1/15/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	5281	ADAM BEVIS NATURAL SYSTEMS LAWN CARE 10957 S GRANITE DR SANDY, UT 84094	Ph: County: 18	New: 5/18/93 Renew: 1/03/94 Expires: 12/31/94	3 5/18/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5170	JOHN R. BEVIS NATURAL SYSTEM LAWN CARE 10957 S GRANITE DR SANDY, UT 84094	Ph: County: 18	New: 2/16/93 Renew: 1/03/94 Expires: 12/31/94	3 2/16/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	7497	ALAN B. BILLS DEPT. OF TRANSPORTATION 430 N MAIN ST MAPLETON, UT 84663	Ph: County: 25	New: 5/01/83 Renew: 1/02/94 Expires: 12/31/94	6 6/10/92 12 12/31/94		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4755	KYLE W. BIRD MATTINSON PEST CONTROL 92 E 400 S PROVO, UT 84606	Ph: 373-3118 County: 25	New: 7/05/91 Renew: 1/04/94 Expires: 12/31/94	3 7 12/08/93 12/31/96		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	7966	TIMOTHY D. BIRD UTAH VALLEY STATE COLLEGE 1884 W 500 N PROVO, UT 84601	Ph: County: 25	New: 10/02/85 Renew: 1/01/94 Expires: 12/31/94	3 5 1/01/93 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9190	BRUCE E. BOGGESS SLC/COUNTY HEALTH DEPT 7415 CHAPEL HILL CIR MIDVALE, UT 84047	Ph: County: 18	New: 12/21/90 Renew: 1/01/94 Expires: 12/31/94	1/01/93 8 12 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7842	LEE BOLLWINKEL SLC PARKS & RECREATION 6935 S SANDLILY CIR WEST JORDAN, UT 84084	Ph: County: 18	New: 4/01/85 Renew: 1/03/94 Expires: 12/31/94	3 1/01/93 12 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5502	HOLLY BOND TURF PLUS 286 E 4695 N PROVO, UT 84604	Ph: County: 25	New: 2/25/94 Renew: 3/11/94 Expires: 12/31/94	3 2/25/94 12/31/96		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator							
4002	7214	DONALD R. BONE UT DIV. OF WILDLIFE RES. 1155 N MAIN ST SPRINGVILLE, UT 84663	Ph: 836-2437 County: 25	New: 1/01/82 Renew: 1/02/94 Expires: 12/31/96	3 5 6 12/08/93 12/31/96		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	5510	DALE A BOOTHE ANIMAL DAMAGE CONTROL 763 N MAIN ST ALPINE, UT 84004	Ph: 756-2648 County: 25	New: 1/01/82 Renew: 1/28/94 Expires: 12/31/96	9 12/15/93 12/31/96		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	5040	VAL L BOWLDEN SALT LAKE MOSQUITO 450 CORNELL DR MIDVALE, UT 84047	Ph: County: 18	New: 4/01/84 Renew: 1/01/94 Expires: 12/31/94	8 12 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	8978	STEPHEN J. BOYD 775 N 970 E SPRINGVILLE, UT 84663	Ph: County: 25	New: 1/15/90 Renew: 1/01/94 Expires: 12/31/94	3 5 1/01/93 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	1547	JERRY R. BOYER LESCO 1611 E MAYFAIR CIR SALT LAKE CITY, UT 84105	Ph: County: 18	New: 3/01/85 Renew: 1/28/94 Expires: 12/31/94	3 7 6/08/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	4237	KYLE BRADSHAW 590 W 1200 N MAPLETON, UT 84664	Ph: County: 25	New: 5/30/89 Renew: 1/03/94 Expires: 12/31/94	3 7 1/01/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	3866	LAWRENCE S. BRADSHAW MONTE'S PEST CONTROL 590 W 1200 N MAPLETON, UT 84664	Ph: 489-4262 County: 25	New: 3/01/88 Renew: 1/03/94 Expires: 12/31/94	3 7 1/01/92 12/31/94		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	9911	JAMES CALVIN BRADT JR. BYU 883 WYMOUNT TERRACE 17-13 PROVO, UT 84604	Ph: 801 378-8491 County: 25	New: 7/07/93 Renew: 1/02/94 Expires: 12/31/94	3 12/31/92 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9255	JEFF W. BRANDT PARK MEADOWS GOLF COURSE 7629 S 2090 W WEST JORDAN, UT 84084	Ph: 561-2190 County: 18	New: 4/05/91 Renew: 1/03/94 Expires: 12/31/94	3 4/27/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9305	NORMAN V. BRAY CENTRAL UTAH WATER CONS. 292 N 700 E PAYSON, UT 84651	Ph: 465-1455 County: 25	New: 5/01/91 Renew: 1/28/94 Expires: 12/31/96	6 12/21/93 12/31/96		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5503	L. SCOTT BRENCHLEY LAWN LIFE 3436 W BECKFORD CIR WEST JORDAN, UT 84088	Ph: 569-8304 County: 18	New: 2/22/94 Renew: 3/18/94 Expires: 12/31/94	3 2/22/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	4288	FRANK E. BRIMHALL 760 E 300 S OREM, UT 84058	Ph: 224-5544 County: 25	New: 9/19/89 Renew: 1/04/94 Expires: 12/31/94	7 1/01/92 12/31/94		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	5045	HUGH C. BRINGHURST JR. COUNTY WEED SUPERVISORS 1814 W 6020 S SALT LAKE CITY, UT 84118	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	6 1/01/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5451	MAXWELL J. BROOKS TERMINIX 4656 BROOKWILLOW COVE #F SALT LAKE CITY, UT 84117	Ph: 277-0402 County: 18	New: 11/23/93 Renew: 1/01/94 Expires: 12/31/94	7 11/23/93 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	4996	AARON PARKER BROWN ENVIRONMENTAL MANAGEMENT 9015 S MICHAEL WAY SANDY, UT 84093	Ph: County: 18	New: 5/05/92 Renew: 1/03/94 Expires: 12/31/94	3 5/05/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4902	KEVIN N. BROWN ORKIN PEST CONTROL 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 3/03/92 Renew: 2/11/94 Expires: 12/31/94	3 7 1/01/92 12/31/94		PARKER
Duly Licensed As A Commercial Pesticide Applicator							
4002	9789	LEE BROWN SLC AIRPORT 10439 S 2775 W SOUTH JORDAN, UT 84065	Ph: County: 18	New: 4/06/93 Renew: 1/01/94 Expires: 12/31/94	3 4/06/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5504	ROBERT J. BRUDENELL 10494 S WHITE SANDS DR SANDY, UT 84070	Ph: 571-1845 County: 18	New: 3/08/94 Renew: 3/18/94 Expires: 12/31/94	3 7 3/08/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	4002	STEVE BRYANT 4265 W DENO DR WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 6/29/88 Renew: 1/03/94 Expires: 12/31/94	3 12/12/91 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	5952	STEVEN BUDGE RIVERSIDE COUNTY CLUB 815 E 400 N OREM, UT 84057	Ph: County: 25	New: 4/01/84 Renew: 1/01/94 Expires: 12/31/94	3 5 1/01/92 12/31/94		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5072	BRENT N. BUELL PENNOCK 826 SONATA ST SALT LAKE CITY, UT 84116	Ph: County: 18	New: 8/11/92 Renew: 1/04/94 Expires: 12/31/94	7 8/11/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	1128	GUIDO BUFFO BUFFO'S TERMITES & PEST C 155 S 200 W PROVO, UT 84601	Ph:801 373-3940 County: 25	New: 1/01/81 Renew: 1/04/94 Expires: 12/31/94	3 6 7 12 12/31/96		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	5505	LEHN BUNDIRCK ALL GREEN 2100 N. REDWOOD RD SALT LAKE CITY, UT 84116	Ph: 363-4777 County: 18	New: 3/08/94 Renew: 3/11/94 Expires: 12/31/94	3 3/08/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	7814	ROBERT J. BURGESS SLC PARKS 1965 W 500 S SALT LAKE CITY, UT 84104	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	3 8/31/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	5635	VAN BURGESS 645 S ALPINE HWY ALPINE, UT 84004	Ph: County: 25	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	10 1/01/93 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	8417	WALLACE K. BURNINGHAM SLC AIRPORT 2589 W 2800 S WEST VALLEY CITY, UT 84119	Ph: 972-4905 County: 18	New: 4/27/87 Renew: 3/11/94 Expires: 12/31/94	6 5/26/92 12/31/94		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5507	BRIAN L. BUSKER TURF PLUS 824 N 50 W OREM, UT 84057	Ph: 225-1869 County: 25	New: 2/28/94 Renew: 3/11/94 Expires: 12/31/94	3 7 2/28/94 12/31/96		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator							
4001	4644	BRENT BYTENDORP 7628 FOREST BEND DR SALT LAKE CITY, UT 84121	Ph: 942-1343 County: 18	New: 4/05/91 Renew: 1/28/94 Expires: 12/31/94	3 12/21/93 12/31/96		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4645	RICHARD BYTENDORP BYTENDORP ENTERPRISES 593 PALI ST SANDY, UT 84070	Ph: 272-6773 County: 18	New: 4/05/91 Renew: 1/28/94 Expires: 12/31/94	3 12/21/93 12/31/96		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1324	PAUL M. CALDWELL WESTERN WEED SERVICE 6079 W 10930 N HIGHLAND, UT 84003	Ph: County: 25	New: 1/01/83 Renew: 1/02/94 Expires: 12/31/94	3 6 1/01/92 12/31/94		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	5333	DARRELL E. CALES GENIE GREEN 3755 S 3600 W SALT LAKE CITY, UT 84119	Ph: 967-7511 County: 18	New: 4/06/93 Renew: 1/04/94 Expires: 12/31/94	3 4/06/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5464	GLEN CAMPBELL ORKIN, SLC 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: 355-4144 County: 18	New: 12/30/93 Renew: 1/30/94 Expires: 12/31/94	7 12/31/93 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5508	PETER M. CAMPBELL PERMA GREEN 814 E SHERMAN AVE SALT LAKE CITY, UT 84105	Ph: 466-6099 County: 18	New: 3/03/94 Renew: 3/11/94 Expires: 12/31/94	3 3/03/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	8783	STEVE J. CAMPBELL SALT LAKE CITY PARKS 4410 S 2990 E SALT LAKE CITY, UT 84124	Ph: 485-3797 County: 18	New: 4/06/89 Renew: 1/01/94 Expires: 12/31/94	3 10/20/92 12/31/94		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	7777	PAUL M. CANNEFAX SALT LAKE CITY PARKS & RE 6352 UYEDA CT WEST JORDAN, UT 84084	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	3 1/01/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	9749	PHIL JAY CAPPADONIA PROVO CITY CEMETERY 692 N 440 W OREM, UT 84057	Ph: County: 25	New: 2/25/93 Renew: 1/04/94 Expires: 12/31/94	3 2/25/93 12/31/95	12	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	1942	GILBERT S. CAPSON TERMITE, INSECT, RODENT 3215 S 2100 E SALT LAKE CITY, UT 84109	Ph: 484-4233 County: 18	New: 4/01/82 Renew: 1/28/94 Expires: 12/31/94	3 7 12/21/93 12/31/96		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	8976	ROSS B. CAPUTO 825 N CATHERINE SALT LAKE CITY, UT 84116	Ph: County: 18	New: 1/05/90 Renew: 1/01/94 Expires: 12/31/94	3 1/01/93 12/31/95	12	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4734	DENNIS A. CARRICO ACORN LAWN & GARDENING 1025 E 2700 S SALT LAKE CITY, UT 84106	Ph: 487-2486 County: 18	New: 5/22/91 Renew: 1/28/94 Expires: 12/31/94	3 12/15/93 12/31/96	12	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3063	MAX L. CARTER 875 E 200 N PAYSON, UT 84651	Ph: County: 25	New: 4/01/85 Renew: 2/11/94 Expires: 12/31/94	3 7 1/01/93 12/31/95	12	COOK Duly Licensed As A Commercial Pesticide Applicator
4002	5805	NORMAN CARTER EAST BAY GOLF COURSE 1975 S PARK PROVO, UT 84601	Ph: County: 25	New: 6/01/83 Renew: 1/02/94 Expires: 12/31/94	1 3 5 1/01/92 12/31/94	8 9	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	1331	LIONEL LEE CHADDERDON UTAH SPRAYING SERVICE 4507 ROYAL ANN CIR WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	3 7 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3985	RICHARD C. CHAFFEE 10926 BOHM PLACE SANDY, UT 84094	Ph: County: 18	New: 6/10/88 Renew: 1/03/94 Expires: 12/31/94	3 7 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code Inspector
4001	3563	GEORGE C. CHAMBERS CHEMLAWN 4030 CARRIE DR WEST VALLEY CITY, UT 84120	Ph: 969-3580 County: 18	New: 2/11/87 Renew: 1/28/94 Expires: 12/31/94	3 12/15/93 12/31/96	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3198	GARY D. CHANDLER GREAT BASIN PEST CONTROL PO BOX 25431 SALT LAKE CITY, UT 84115	Ph: County: 18	New: 7/01/85 Renew: 1/03/94 Expires: 12/31/94	3 7 2/09/93 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5467	BRENT R. CHAPMAN 180 E 3600 S #1 SALT LAKE CITY, UT 84121	Ph: 269-8826 County: 18	New: 1/18/94 Renew: 2/11/94 Expires: 12/31/94	3 1/18/94 12/31/96	CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	9945	KEVIN A. CHILTON SLC CITY PARKS 32 W 3400 S SALT LAKE CITY, UT 84115	Ph:801 484-5803 County: 18	New: 10/19/93 Renew: 1/03/94 Expires: 12/31/94	3 10/19/93 12/31/95	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	8961	LEE R. CHIPMAN 4334 ALPINE MEADOWS CIR WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 12/29/89 Renew: 1/04/94 Expires: 12/31/94	3 1/01/93 12/31/95	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5427	STEVE CHIPMAN BUG BUSTERS 3678 BRIGHTON POINT DR SALT LAKE CITY, UT 84121	Ph:801 943-4979 County: 18	New: 9/04/93 Renew: 1/04/94 Expires: 12/31/94	3 7 9/04/93 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5073	CRAIG T. CHRISTENSEN TRULY NOLAN 1811 E SEGO LILLY DR SANDY, UT 84092	Ph: County: 18	New: 7/21/92 Renew: 1/01/94 Expires: 12/31/94	7 7/21/92 12/31/94	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	2926	JOE B. CHRISTENSEN CHEM LAWN 6620 S ROYAL HARVEST #21 SALT LAKE CITY, UT 84121	Ph: 566-6840 County: 18	New: 10/01/84 Renew: 1/03/94 Expires: 12/31/94	3 1/01/92 12/31/94	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	1596	TALMAGE CHRISTENSEN SELF EMPLOYEE 4592 W 4695 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 3/01/85 Renew: 1/02/94 Expires: 12/31/94	7 1/01/93 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5283	KARL A. CHRISTIANSEN SPENCER LAWN CARE 10817 N 5920 W HIGHLAND, UT 84003	Ph: County: 25	New: 4/30/93 Renew: 1/03/94 Expires: 12/31/94	3 4/30/93 12/31/95	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	5371	CHARLES CHRISTOPHER 1611 E MAYFAIR CIR SALT LAKE CITY, UT 84105	Ph:801 582-0737 County: 18	New: 7/06/93 Renew: 1/04/94 Expires: 12/31/94	3 12/31/92 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5510	DANIEL A. CLAWSON NUTRA-SYSTEMS LAWN CARE 9654 AMBER LN SANDY, UT 84094	Ph: 572-0187 County: 18	New: 3/01/94 Renew: 3/11/94 Expires: 12/31/94	3 7 3/01/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	9115	RUSSELL G. CLEGG UVCC 273 S 900 W PROVO, UT 84601	Ph: County: 25	New: 6/27/90 Renew: 1/04/94 Expires: 12/31/94	3 1/01/93 12/31/95		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9993	STEVEN M. CLUFF PROVO CITY CORP 1758 W 150 N PROVO, UT 84060	Ph: 373-5784 County: 25	New: 1/28/94 Renew: 2/11/94 Expires: 12/31/96	3 1/28/94 12/31/96		COOK, DARRELL Duly Licensed As A Non Commercial Pesticide Applicator
4001	5516	JULIE A. COLONNA 5426 W PEGGY DR WEST VALLEY CITY, UT 84120	Ph: 963-9747 County: 18	New: 2/22/94 Renew: 3/18/94 Expires: 12/31/94	3 2/22/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	5517	ROGER L. COLTON GREEN WORLD 195 N 800 E PLEASANT GROVE, UT 84062	Ph: 785-6348 County: 25	New: 3/18/94 Renew: 3/11/94 Expires: 12/31/94	3 3/18/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	4353	MATTHEW COOK 4860 W 4100 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 2/21/90 Renew: 3/11/94 Expires: 12/31/94	3 3/08/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	5140	JOHN COOMBS 2815 DEARBORN ST SALT LAKE CITY, UT 84106	Ph: County: 18	New: 2/09/93 Renew: 1/03/94 Expires: 12/31/94	3 2/09/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5355	ADAM COON CHEMLAWN 3874 S 5200 W WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 6/15/93 Renew: 1/03/94 Expires: 12/31/94	3 6/15/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3631	WILLIAM SCOTT COONS ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: 566-5095 County: 18	New: 3/19/87 Renew: 2/11/94 Expires: 12/31/94	7 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5518	GARRETT RHETT COOPER ARTISTIC OUTDOORS LANDSCA 3990 S 1870 E SALT LAKE CITY, UT 84124	Ph: 272-2686 County: 18	New: 2/18/94 Renew: 3/11/94 Expires: 12/31/94	3 2/18/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	9545	JASON E. CORDNER DREM CITY 1375 W 500 N #105 PROVO, UT 84601	Ph: County: 25	New: 4/27/92 Renew: 1/01/94 Expires: 12/31/94	3 4/27/92 12/31/94		COOK Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	10038	WARREN BRUCE COX CORP OF PRES 141 FIRST AVE #309 SALT LAKE CITY, UT 84103	Ph: 531-1188 County: 18	New: 3/03/94 Renew: 3/18/94 Expires: 12/31/96	3 3/03/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Non Commercial Pesticide Applicator
4002	7980	KERRY CRAMER SLC CO. HEALTH DEPT 964 BRYANSTON COVE MURRAY, UT 84123	Ph: County: 18	New: 12/17/85 Renew: 1/01/94 Expires: 12/31/94	7 1/01/93 12/31/95	8 12	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	3705	DAVID J. CROCKETT ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: 268-1689 County: 18	New: 5/14/87 Renew: 2/11/94 Expires: 12/31/94	7 12/15/91 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	1468	DANIEL LYN CURTIS CURTIS LAWN CURE 1381 W 12295 S RIVERTON, UT 84065	Ph: County: 18	New: 4/01/84 Renew: 2/18/94 Expires: 12/31/94	3 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3831	ROBERT E. DAVIDSON 2085 HAUN AVE SALT LAKE CITY, UT 84121	Ph: 272-7047 County: 18	New: 2/08/88 Renew: 1/28/94 Expires: 12/31/94	3 12/18/91 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9423	GLENN M. DAVIS UT DIV WILDLIFE RESOURCES 4075 MINUET CIR SALT LAKE CITY, UT 84119	Ph: County: 18	New: 6/20/92 Renew: 1/04/94 Expires: 12/31/94	5 6/20/92 12/31/94		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	9729	KEVIN L. DAVIS STRAWBERRY HIGH LINE CAN 440 W MAIN #6 SANTAQUIN, UT 84655	Ph: County: 25	New: 2/12/93 Renew: 1/02/94 Expires: 12/31/94	6 2/12/93 12/31/95		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9238	MARC A. DAVIS PROVO CITY CORP 904 W 1225 N PROVO, UT 84604	Ph: 373-2371 County: 25	New: 3/20/91 Renew: 1/02/94 Expires: 12/31/96	3 12/08/93 12/31/96		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	8537	STEVEN DAVIS OREM CITY RR 1 BOX 311 B PROVO, UT 84601	Ph: 375-7570 County: 25	New: 2/08/88 Renew: 1/02/94 Expires: 12/31/94	3 1/01/92 12/31/94		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	8583	VERA J. DAVIS PROVO CITY PARKS DEPT. 904 W 1225 N PROVO, UT 84604	Ph: 373-2371 County: 25	New: 3/21/88 Renew: 1/03/94 Expires: 12/31/94	3 4/09/92 12/31/94		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9192	CLINT DAYLEY PARK CITY MUNICIPAL CORP 8902 S 40 E SANDY, UT 84070	Ph: 255-9213 County: 18	New: 4/05/91 Renew: 2/18/94 Expires: 12/31/96	3 2/15/94 12/31/96		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9476	TROY DAYLEY PARK CITY MUNICIPAL 8911 S 40 E SANDY, UT 84070	Ph: County: 18	New: 2/24/92 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	8345	ALLEN B. DEA SLC PARKS DEPT 3514 W 7380 S WEST JORDAN, UT 84084	Ph: 964-2231 County: 18	New: 3/23/87 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	1876	MARK B. DEAN 2512 GREGSON AVE SALT LAKE CITY, UT 84109	Ph: 466-1666 County: 18	New: 3/01/82 Renew: 2/11/94 Expires: 12/31/94	12/15/93 12/31/96	3 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5142	SCOTT WAYNE DEAN 1642 E 4500 S SALT LAKE CITY, UT 84117	Ph: County: 18	New: 2/09/93 Renew: 1/04/94 Expires: 12/31/94	2/09/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5397	ROY DEL TORO 3902 W ROCKWOOD WAY #30 WEST VALLEY CITY, UT 84120	Ph:801 964-9044 County: 18	New: 7/20/93 Renew: 2/11/94 Expires: 12/31/94	7/20/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9078	RONALD K. DEVENISH 3018 E 7070 S SALT LAKE CITY, UT 84121	Ph: County: 18	New: 4/28/90 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	5 6 7 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7982	EUGENE C. DEVENPORT SLC CO. HEALTH DEPT. 610 S 200 E SALT LAKE CITY, UT 84111	Ph: County: 18	New: 12/17/85 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	7 8 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	8529	DARYL L. DEVEY CENTRAL UTAH WATER CONS. 740 E 300 N ALPINE, UT 84004	Ph: 756-9345 County: 25	New: 1/12/88 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	6	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5074	THOMAS E. DEVROOM 216 B ST SALT LAKE CITY, UT 84103	Ph: County: 18	New: 8/04/92 Renew: 1/28/94 Expires: 12/31/94	8/04/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5447	ALAN DEWEY TRULY NOLEN 813 E 650 S OGDEN, UT 84404	Ph:801 798-1551 County: 25	New: 10/22/93 Renew: 1/03/94 Expires: 12/31/94	10/22/93 12/31/95	7	CLARK, MERRILL
Duly Licensed As A Commercial Pesticide Applicator							
4002	9912	DAVID DIAZ RIVERSIDE COUNTRY CLUB 568 E 1864 S OREM, UT 84058	Ph:801 224-8845 County: 25	New: 7/19/93 Renew: 1/02/94 Expires: 12/31/94	12/31/92 12/31/95	3 5 12	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
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Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	5717	SAMMIE L DICKSON SALT LAKE MOSQUITO PO BOX 16189 SALT LAKE CITY, UT 84116	Ph: 966-8685 County: 18	New: 1/01/82 Renew: 1/28/94 Expires: 12/31/96	12/15/93 8 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	10032	REUBEN H. DIETZ UTAH DIV WILDLIFE RES 1864 INDEPENDENCE BLVD #H SALT LAKE CITY, UT 84116	Ph: 533-9058 County: 18	New: 12/16/93 Renew: 3/11/94 Expires: 12/31/96	1/01/94 12/31/96	5	
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9239	CHRISTOPHER DODD SANDY CITY PARKS DEPT 8809 S 250 E SANDY, UT 84070	Ph: 253-3582 County: 18	New: 3/20/91 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5429	LYNN J. DRAPER TERMINTE INSECT & RODENT 2180 E 3715 S SALT LAKE CITY, UT 84109	Ph: 801 272-9078 County: 18	New: 9/14/93 Renew: 1/03/94 Expires: 12/31/94	9/14/93 12/31/95	3 7 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9211	LISA DUNCAN SPRINGVILLE CITY PARKS 145 W 100 S SPRINGVILLE, UT 84663	Ph: 489-5105 County: 25	New: 2/22/91 Renew: 1/02/94 Expires: 12/31/96	12/08/93 12/31/96	3	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5480	NEIL K. DUNCAN DUNCAN ENTERPRISES 797 E BOURDEAUX MIDVALE, UT 84047	Ph: 265-9589 County: 18	New: 1/18/94 Renew: 2/11/94 Expires: 12/31/94	1/18/94 12/31/96	3 6 12	CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	3636	CHRISTOPHER SEAN DUNN LAWN LIFE 3111 W 3875 S WEST VALLEY CITY, UT 84119	Ph: 966-4971 County: 18	New: 3/19/87 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9473	JEFFREY R. DYRENG SEVEN PEAKS RESORT 334 W 200 N APT106 PROVO, UT 84601	Ph: County: 25	New: 2/24/92 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5373	JASON L. EARL HARMON & SONS LAWN CARE 4609 S 3900 W ROY, UT 84067	Ph: 801 226-0170 County: 25	New: 7/09/93 Renew: 1/28/94 Expires: 12/31/94	12/31/92 12/31/95	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	4098	DANIEL C. EBY DAN'S LANDSCAPING 3926 BIRCH DR SALT LAKE CITY, UT 84124	Ph: County: 18	New: 3/13/89 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9279	KEVIN G. EDGAR SALT LAKE CITY PARKS DEPT 1242 S MISSION RD SALT LAKE CITY, UT 84104	Ph: 972-5113 County: 18	New: 4/22/91 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	4759	BRUCE EDMONDS ENVIRO-CARE PEST CONTROL 560 N 2050 W PROVO, UT 84601	Ph: 375-4129 County: 25	New: 7/05/91 Renew: 1/28/94 Expires: 12/31/94	3 7 12 12/31/96		COOK Duly Licensed As A Commercial Pesticide Applicator
4002	9711	FLOYD J. EDWARDS RICHMOND PROPERTY 6357 MEANDER SALT LAKE CITY, UT 84120	Ph: County: 18	New: 12/29/92 Renew: 1/01/94 Expires: 12/31/94	3 7 1/01/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	7941	LAVELL EDWARDS UTAH TECHNICAL COLLEGE 60 E 1085 N OREM, UT 84057	Ph: County: 25	New: 7/01/85 Renew: 1/01/94 Expires: 12/31/94	3 1/01/93 12/31/95		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9038	WILLIAM F. EDWARDS UTAH VALLEY COMM. COLLEGE 111 N PARADISE DR OREM, UT 84057	Ph: County: 25	New: 3/20/90 Renew: 1/01/94 Expires: 12/31/94	3 1/01/93 12/31/95		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9009	JERRY ELLEFSEN 5665 W 4360 S WEST VALLEY CITY, UT 84120	Ph: 967-9125 County: 18	New: 2/17/90 Renew: 1/01/94 Expires: 12/31/94	3 1/01/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4270	STEVEN C. ELLER TERMINEX 6225 LOBELIA DR WEST JORDAN, UT 84084	Ph: 966-0936 County: 18	New: 7/26/89 Renew: 1/28/94 Expires: 12/31/94	7 12/21/93 12/31/96		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5075	NOLAN T. ELLIS ROWBERRY AND SONS 1717 W 80 S PROVO, UT 84606	Ph: County: 25	New: 7/28/92 Renew: 1/04/94 Expires: 12/31/94	3 7 7/28/92 12/31/94		COOK Duly Licensed As A Commercial Pesticide Applicator
4001	4875	JOHN H. EMMERICH NUTRA SYSTEMS 4035 S CARRIE DR SALT LAKE CITY, UT 84120	Ph: County: 18	New: 2/24/92 Renew: 1/03/94 Expires: 12/31/94	3 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9529	CALVIN ENGH PINE RIDGE GARDENS 12134 S PINERIDGE RD SANDY, UT 84094	Ph: County: 18	New: 3/17/92 Renew: 1/02/94 Expires: 12/31/94	1 3 3/17/92 12/31/94		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5521	DARREN LEE ENSIGN TURF PLUS LAWN CARE 598 N 100 W #3 PROVO, UT 84601	Ph: 377-0871 County: 25	New: 3/07/94 Renew: 3/11/94 Expires: 12/31/94	3 3/07/94 12/31/96		COOK, DARRELL Duly Licensed As A Commercial Pesticide Applicator
4001	4402	CHRISTOPHER J. EPPLER EPPLER'S GREEN THUMB INC. 4057 S LISA DR HOLLADAY, UT 84124	Ph: County: 18	New: 3/23/90 Renew: 2/18/94 Expires: 12/31/94	3 3/09/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	1424	BRIGHAM P. EVANS GREEN MAGIC PO BOX 27903 SALT LAKE CITY, UT 84115	Ph: County: 18	New: 4/01/84 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	1 3 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1592	WILLIAM P. EVELYN LAWN PRIDE 5745 LODESTONE AVE KEARNS, UT 84118	Ph: 969/1635 County: 18	New: 3/01/85 Renew: 1/28/94 Expires: 12/31/94	12/28/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5522	LANCE EWING CHEMLAWN 843 E THREE FOUNT DR #257 MURRAY, UT 84107	Ph: 264-9433 County: 18	New: 2/18/94 Renew: 3/11/94 Expires: 12/31/94	2/18/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4001	3966	LAMONT W. FABER PO BOX 485 MIDVALE, UT 84047	Ph: 566-2318 County: 18	New: 5/20/88 Renew: 2/18/94 Expires: 12/31/94	1/01/92 12/31/94	3 6 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1799	REX E. FARNWORTH FARNWORTH TERMITE & PEST 3738 CAROLINA DR WEST JORDAN, UT 84084	Ph: County: 18	New: 3/01/81 Renew: 1/03/94 Expires: 12/31/94	9/14/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9175	ROBERT FAULKNER 975 W 800 N OREM, UT 84057	Ph: County: 25	New: 11/28/90 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9501	J. MARCUS FENTON SALT LAKE CITY CORP. 1716 WHITE AVE SALT LAKE CITY, UT 84106	Ph: County: 18	New: 2/24/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1279	CHRIS A. FINDLAY MR TERMIPEST OF UT CO 1763 N 1400 W LEHI, UT 84043	Ph: 768-9966 County: 25	New: 1/01/82 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	7 12		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	9996	RAYMOND FLEMING 763 E 3155 S SALT LAKE CITY, UT 84106	Ph: 777-2287 County: 18	New: 12/13/93 Renew: 1/28/94 Expires: 12/31/94	12/13/93 12/31/96	3		PARKER, CURTIS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9997	RENE STODDARD FLEMING 763 E 3155 S SALT LAKE CITY, UT 84106	Ph: 486-5201 County: 18	New: 12/13/93 Renew: 1/28/94 Expires: 12/31/94	12/13/93 12/31/96	3		PARKER, CURTIS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9670	MIKE FORREST SALT LAKE CITY PARKS 4276 S 3920 W SALT LAKE CITY, UT 84124	Ph: County: 18	New: 10/27/92 Renew: 1/02/94 Expires: 12/31/94	10/27/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9547	JAMES FRASER SL COUNTY M.A.D. PO BOX 367 MIDVALE, UT 84047	Ph: County: 18	New: 4/21/92 Renew: 1/01/94 Expires: 12/31/94	4/21/92 8 4/21/92 12/31/94		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5240	ROBERT C. FUSTOS BAREFOOT GRASS LAWN SERV 3675 W 1987 S SALT LAKE CITY, UT 84104	Ph: County: 18	New: 4/13/93 Renew: 1/03/94 Expires: 12/31/94	4/13/93 3 4/13/93 12/31/95		PARKER
Duly Licensed As A Commercial Pesticide Applicator							
4001	5025	PHILLIP T. GAGE LAWN LIFE 4970 W 5400 S KEARNS, UT 84118	Ph: County: 18	New: 9/19/89 Renew: 1/01/94 Expires: 12/31/94	5/26/92 3 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	8915	EDWARD TONY GALLEGOS 5530 S SILVER TIP DR KEARNS, UT 84118	Ph: County: 18	New: 7/14/89 Renew: 1/02/94 Expires: 12/31/94	2/02/93 7 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5489	ELIAS LITO GARCIA GROUNDS CONTROL 4086 S 300 E #E MURRAY, UT 84107	Ph: 261-5597 County: 18	New: 2/08/94 Renew: 2/25/94 Expires: 12/31/94	2/08/94 3 2/08/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	9186	STEVE GARCIA COUNTRY CLUB 441 S STATE #36 OREM, UT 84058	Ph: County: 25	New: 12/28/90 Renew: 1/02/94 Expires: 12/31/94	1/01/93 3 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9159	RANDY GARSIDE MAGNA MOSQUITO ABATEMENT 7188 W 3870S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 8/14/90 Renew: 1/02/94 Expires: 12/31/94	3/16/93 8 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9898	RYAN GARSIDE 7188 W 3870 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 6/18/93 Renew: 1/02/94 Expires: 12/31/94	6/18/93 6 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	2277	BRIAN H. GETZELMAN ARBOR CARE 405 W 500 N SALT LAKE CITY, UT 84103	Ph: County: 18	New: 7/01/83 Renew: 1/03/94 Expires: 12/31/94	4/21/92 3 7 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5490	DANIEL D. GIFFORD YOUR GARDENING ANGELS 340 W 920 S #115 PROVO, UT 84601	Ph: 375-4301 County: 25	New: 2/09/94 Renew: 3/11/94 Expires: 12/31/94	3 5 6 7 2/09/94 12 12/31/96		DAY, DON
Duly Licensed As A Commercial Pesticide Applicator							
4001	3893	TEX F. GIFFORD YOUR GARDENING ANGELS INC 50 S CENTER AMERICAN FORK, UT 84003	Ph: 756-6144 County: 25	New: 3/21/88 Renew: 1/04/94 Expires: 12/31/94	1/01/92 3 5 6 7 12		COOK
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	2824	DAVID S. GILLETT LAWN LIFE 4102 W 3980 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 5/01/84 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	8539	VERNON G. GIRARD ALPINE SCHOOL DIST. 790 N 400 W LINDON, UT 84042	Ph: 785-7590 County: 25	New: 2/08/88 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 7 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7984	JAMES H. GISH WILBUR ELLIS COMPANY 1873 E CRANDALL CIR SALT LAKE CITY, UT 84106	Ph: County: 18	New: 12/17/85 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 10		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8895	BRENT L. GLEDHILL 118 S EASTWOOD OREM, UT 84058	Ph: County: 25	New: 6/21/89 Renew: 2/25/94 Expires: 12/31/94	1/01/92 12/31/94	10		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9258	MATTHEW G. GOEBEL MOSQUITO ABATEMENT-MAGNA 4978 ATWOOD BLVD MURRAY, UT 84107	Ph: 265-0432 County: 18	New: 4/05/91 Renew: 1/02/94 Expires: 12/31/94	7/13/93 12/31/95	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9460	MARSHALL GOELTZ UTAH STATE PARKS & REC. 1594 W 400 S #71 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 1/04/92 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94			CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7553	MIKE GOLDBERG QUALITY FLOWERS 2658 SWASONT WAY SALT LAKE CITY, UT 84117	Ph: County: 18	New: 1/01/83 Renew: 1/03/94 Expires: 12/31/94	6/29/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9811	TIBERIO H. GONZALEZ 1772 W. HOMESTEAD EM LN#2 WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 4/20/93 Renew: 1/02/94 Expires: 12/31/94	4/20/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4024	DOUGLAS D. GOOD WEED FREE 225 N 2000 W SPRINGVILLE, UT 84663	Ph: County: 25	New: 9/06/88 Renew: 2/18/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		DALEBOUT
Duly Licensed As A Commercial Pesticide Applicator								
4002	9954	DAVID B. GOODFELLOW SALT LAKE CITY PARKS 430 WENDELL DR SALT LAKE CITY, UT 84115	Ph:801 262-5719 County: 18	New: 11/23/93 Renew: 1/01/94 Expires: 12/31/94	11/23/93 12/31/95	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5486	GARY S. GOODMAN CHEMLAWN 1528 E SANTIAGO LN #21 SALT LAKE CITY, UT 84121	Ph: 266-4094 County: 18	New: 2/01/94 Renew: 2/25/94 Expires: 12/31/94	2/01/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	8858	KERRY I. GOODRICH 8517 S MCKENZIE LN WEST JORDAN, UT 84088	Ph: County: 18	New: 5/03/89 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	1 10 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5511	LUIS F. GORDILLO 402 S 900 W PROVO, UT 84601	Ph: 374-6426 County: 25	New: 3/04/94 Renew: 3/11/94 Expires: 12/31/94	3/04/94 12/31/94	3		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4001	4163	DAVID J. GORDON RBM SERVICES 1270 W 1050 N PROVO, UT 84604	Ph: 377-2460 County: 25	New: 4/04/89 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	6		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4033	STEVE R. GOSSARD STEWARTS PEST CONTROL 620 N 340 E OREM, UT 84057	Ph: County: 25	New: 9/28/88 Renew: 1/04/94 Expires: 12/31/94	1/28/93 12/31/95	3 7 12		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	7565	JERRY GRAY TRI-CITY GOLF COURSE 470 W 900 N PLEASANT GROVE, UT 84062	Ph: 785-4156 County: 25	New: 1/01/83 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8363	MICHAEL GREGG 1046 N 1300 W SALT LAKE CITY, UT 84116	Ph: County: 18	New: 3/23/87 Renew: 1/04/94 Expires: 12/31/94	3/19/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9500	LANCE GREGOVICH SALT LAKE CITY CORP. 1160 N VICTORIA WAY SALT LAKE CITY, UT 84116	Ph: County: 18	New: 2/24/92 Renew: 1/02/94 Expires: 12/31/94	2/24/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5106	MARK R. GRESHAM ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 10/27/92 Renew: 2/11/94 Expires: 12/31/94	10/27/92 12/31/94	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	8034	TODD W. GROSS SANDY CITY PARKS DEPT 4072 S HIGHLAND DR #4 HOLLADAY, UT 84124	Ph: County: 18	New: 3/12/86 Renew: 1/01/94 Expires: 12/31/94	4/21/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4962	KEITH GULBRANSEN SNARR BROTHERS INC. 2375 BRYAN AVE SALT LAKE CITY, UT 84108	Ph: County: 18	New: 3/31/92 Renew: 1/04/94 Expires: 12/31/94	3/31/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2123	ELLIOTT GUMMERSALL ALL IN ONE PEST CONTROL 1472 VAN BUREN AVE SALT LAKE CITY, UT 84104	Ph: County: 18	New: 3/01/83 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	7367	ELIZABETH A. GURR LDS CHURCH/GROUNDS MAINT. 1650 W 4270 S SALT LAKE CITY, UT 84123	Ph: 268-3189 County: 18	New: 1/01/83 Renew: 3/11/94 Expires: 12/31/96	3/03/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9242	KEVIN GUST SALT LAKE COUNTY PARKS 9246 S 3400 W WEST JORDAN, UT 84084	Ph: 562-2013 County: 18	New: 3/20/91 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9686	F. BRANDT GUTERMUTH UT DIV OF WILDLIFE RES 1596 W N TEMPLE ST SALT LAKE CITY, UT 84116-3195	Ph: County: 18	New: 12/18/92 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	5		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8344	LYLE L. HAGEN SLC PARKS DEPT 8169 S 700 E SANDY, UT 84070	Ph: 250-6617 County: 18	New: 3/23/87 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7875	ARTHUR E. HAGGEN SOIL CONSERVATION 470 E 100 N PLEASANT GROVE, UT 84062	Ph: County: 25	New: 5/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	1 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5482	WILLIAM TROY HALL MODERN MECHANICAL SYS 10358 S WEEPING WILLOW SANDY, UT 84070	Ph: 576-1030 County: 18	New: 12/15/93 Renew: 3/04/94 Expires: 12/31/94	12/15/93 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4001	3929	LANE S. HALVERSEN HALVERSEN FERTILIZER 8017 S SHOWCASE LN SANDY, UT 84094	Ph: 364-5978 County: 18	New: 4/06/88 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9449	DEBRA M. HAND BONNEVILLE NURSERY 1130 E MAIN ST AMERICAN FORK, UT 84003	Ph: County: 25	New: 1/04/92 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9105	ERNEST G. HANKS UTAH COUNTY WEED CONTROL 14 E 9800 S SALEM, UT 84653	Ph: County: 25	New: 6/05/90 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5515	ROBERT HANLEN 798 E TARA CIR MIDVALE, UT 84047	Ph: 561-1386 County: 18	New: 3/08/94 Renew: 3/11/94 Expires: 12/31/94	3/08/94 12/31/96	3 7		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4001	5398	FRED HANNERT PENNOCK PEST CONTROL 1768 W 1300 N #2 SALT LAKE CITY, UT 84116	Ph: 801 530-1329 County: 18	New: 7/20/93 Renew: 1/04/94 Expires: 12/31/94	7/20/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	4965	ROB HANSEN CHEMLAWN LAWN CARE 6778 S 2300 E SALT LAKE CITY, UT 84121	Ph: County: 18	New: 3/31/92 Renew: 1/03/94 Expires: 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4587	STANLEY C. HARBUCK HOME INSPECTION SERVICES PO BOX 1643 SALT LAKE CITY, UT 84110	Ph: 582-3208 County: 18	New: 2/05/91 Renew: 1/01/94 Expires: 12/31/94	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9143	JASON HARDMAN 7488 W 2820 S MAGNA, UT 84044	Ph: County: 18	New: 7/19/90 Renew: 1/01/94 Expires: 12/31/94	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4086	EARL F. HARDWICK HARDWICK PEST CONTROL 157 HARVARD AVE SALT LAKE CITY, UT 84111	Ph: County: 18	New: 3/13/89 Renew: 1/04/94 Expires: 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5289	SEAN HARDWICK HARDWICK PEST CONTROL 2124 S 300 E SALT LAKE CITY, UT 84115	Ph: County: 18	New: 3/16/93 Renew: 1/04/94 Expires: 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5526	JEFFERY DAVID HARDY TRUGREEN 3810 S REDWOOD #2242 WEST VALLEY CITY, UT 84119	Ph: 977-0443 County: 18	New: 2/18/94 Renew: 3/11/94 Expires: 12/31/94	3 7		PARKER, CURTIS
Duly Licensed As A Commercial Pesticide Applicator							
4001	5477	THOMAS HARLOW HOME INSP SERVICED OF UT 519 S DOUGLAS SALT LAKE CITY, UT 84102	Ph: 582-5721 County: 18	New: 1/11/94 Renew: 2/11/94 Expires: 12/31/94	7		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	5147	ANDREW D. HARPER CHEMLAWN 1148 N COLORADO SALT LAKE CITY, UT 84116	Ph: County: 18	New: 3/09/93 Renew: 1/03/94 Expires: 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1888	TIMOTHY D. HARPER LAWN GEVITY 2601 E CINNABAR LN SALT LAKE CITY, UT 84121	Ph: 266-0789 County: 18	New: 3/01/82 Renew: 3/18/94 Expires: 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5117	LARRY R. HARRIS TERMINIX 2118 E KRAMER DR SANDY, UT 84094	Ph: County: 18	New: 12/29/92 Renew: 1/03/94 Expires: 12/31/94	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9068	BRIAN W. HARTLEY EAST BAY GOLF MAIN. 213 S 400 E SPRINGVILLE, UT 84663	Ph: County: 25	New: 5/02/90 Renew: 2/25/94 Expires: 12/31/94	3 5 6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9399	RICHARD P. HARTMAN WILDLIFE RESOURCES 1185 N MAIN ST SPRINGVILLE, UT 84663	Ph: 756-9962 County: 25	New: 6/20/91 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3 5 6	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9259	MICHAEL C. HAWS PROVO CITY PARKS 807 W 600 S PROVO, UT 84601	Ph: 374-8216 County: 25	New: 4/05/91 Renew: 1/28/94 Expires: 12/31/94	3/06/92 12/31/94	2 3 5 12	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9400	JOHN ROBERT HAYES UVRMC 526 S 1450 E SPANISH FORK, UT 84660	Ph: 798-7782 County: 25	New: 7/18/91 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	3479	TAMARA LYNN HED COTTAGE GARDENS 6844 GREENFIELD WAY SALT LAKE CITY, UT 84121	Ph: County: 18	New: 7/28/86 Renew: 1/28/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	8544	DALE HEMENWAY OREM CITY 863 S 550 E OREM, UT 84058	Ph: 225-5138 County: 25	New: 2/08/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4002	9117	JOHN HENDERSON SL COMMUNITY COLLEGE 14390 S REDWOOD RD BLUFFDALE, UT 84065	Ph: County: 18	New: 6/27/90 Renew: 1/03/94 Expires: 12/31/94	5/11/93 12/31/95	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	9457	MICHAEL T. HENRIE CASCADE FAIRWAYS GOLF 827 N 60 E OREM, UT 84057	Ph: County: 25	New: 1/04/92 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3	COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	3254	STERLING E. HERRMANN MOUNT COLUMBIA ENTERPRISE 7474 MARYLEBONE RD WEST JORDAN, UT 84084	Ph: 561-8177 County: 18	New: 10/02/85 Renew: 1/04/94 Expires: 12/31/94	5/05/92 12/31/94	3 5 7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9604	BRET HICKEN COUNTY MOSQUITO ABATEMENT 3027 E 7338 S SALT LAKE CITY, UT 84121	Ph: County: 18	New: 6/16/92 Renew: 1/01/94 Expires: 12/31/94	6/16/92 12/31/94	8	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5528	LARRY LYNN HIGGINSON WEED FREE 294 N 500 E NEPHI, UT 84618	Ph: 623-3321 County: 25	New: 2/14/94 Renew: 3/11/94 Expires: 12/31/94	2/14/94 12/31/96	3	COOK, DARRELL Duly Licensed As A Commercial Pesticide Applicator
4002	8806	STANLEY HIRASE 5236 HUNTER DR WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 4/17/89 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5291	DEREK J. HOAR EPPLER, CHRIS 1769 W STARDUST DR SALT LAKE CITY, UT 84118	Ph: County: 18	New: 5/03/93 Renew: 1/04/94 Expires: 12/31/94	3 5/03/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	8595	JOEL A. HOBBS UP&L 4433 S CHARLES DR WEST VALLEY CITY, UT 84120	Ph: 964-1619 County: 18	New: 4/06/88 Renew: 1/01/94 Expires: 12/31/94	6 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	8884	STUART L. HOFF 1862 S 543 E OREM, UT 84058	Ph: County: 25	New: 5/17/89 Renew: 1/01/94 Expires: 12/31/94	6 4/08/92 12/31/94		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	3835	ROBERT G. HOGAN ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: 783-5509 County: 18	New: 2/08/88 Renew: 2/11/94 Expires: 12/31/94	7 1/01/92 12/31/94		WILSON Duly Licensed As A Commercial Pesticide Applicator
4001	5375	KEVIN R. HOLDERBY SOLID CONSTRUCTORS 2411 W 3800 S #7 WEST VALLEY CITY, UT 84119	Ph:801 966-1591 County: 18	New: 7/06/93 Renew: 1/04/94 Expires: 12/31/94	3 6 12/31/92 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9907	DAWN HOLZER APHIS 1860 W ALEXANDER ST #B WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 6/17/93 Renew: 1/02/94 Expires: 12/31/94	9 6/17/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4968	DANIEL HOOPER SNARR BROS. INC. 2475 CHADWICK ST SALT LAKE CITY, UT 84106	Ph: County: 18	New: 3/31/92 Renew: 1/24/94 Expires: 12/31/94	3 3/31/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5316	MICHAEL C. HOOPER 1105 E CEDAR AVE PROVO, UT 84604	Ph: County: 25	New: 5/12/93 Renew: 1/04/94 Expires: 12/31/94	3 5/12/93 12/31/95		COOK Duly Licensed As A Commercial Pesticide Applicator
4001	5078	MICHAEL E. HOOPER SNARR BROS INC 1985 S 1300 E APT #A SALT LAKE CITY, UT 84105	Ph: County: 18	New: 8/18/92 Renew: 1/04/94 Expires: 12/31/94	3 7 8/18/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5426	RANDY L. HORTON PO BOX 70106 WEST VALLEY CITY, UT 84170	Ph: County: 18	New: 3/02/93 Renew: 1/04/94 Expires: 12/31/94	3 3/02/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9299	BRIAN HOUGAARD SLC MOSQUITO ABATEMENT 1938 E 7130 S SALT LAKE CITY, UT 84121	Ph: 943-7917 County: 18	New: 4/22/91 Renew: 1/28/94 Expires: 12/31/96	8 12/21/93 12/31/96		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	4134	STEVE HOWLETT JORDAN RIVER GOLF COURSE 8546 S 1330 E SANDY, UT 84093	Ph: 485-6959 County: 18	New: 12/26/89 Renew: 1/02/94 Expires: 12/31/94	8/18/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4947	MARTIN HUEBNER 6960 S STATE #1611 MIDVALE, UT 84047	Ph: County: 18	New: 3/16/92 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3	ASHCROFT Duly Licensed As A Commercial Pesticide Applicator
4001	1284	DAVID L. HUGHES MR. TERMI-PEST 6617 S 1460 W MURRAY, UT 84123	Ph: 261-2847 County: 18	New: 1/01/82 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5079	SCOTT M. HUGHES MR TERMI-PEST PEST CONTRO 6617 S 1460 W MURRAY, UT 84123	Ph: County: 18	New: 7/28/92 Renew: 1/03/94 Expires: 12/31/94	7/28/92 12/31/94	7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5148	ROGER L. HUNCHUSKY BAREFOOT GRASS LAWN SERV 1480 W BROOK RIDGE LN-203 SALT LAKE CITY, UT 84123	Ph: County: 18	New: 3/02/93 Renew: 1/04/94 Expires: 12/31/94	3/02/93 12/31/95	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	1543	ARNOLD B. HUNT HUNTS PEST CONTROL 65 N 200 E LEHI, UT 84043	Ph: County: 25	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 12	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	4624	DAVID HUNT HUNTS PEST CONTROL 265 E 400 N A LEHI, UT 84043	Ph: 768-3641 County: 25	New: 3/20/91 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3 7	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	1117	RANDY P. HUNT HUNTS PEST CONTROL 476 E 110 N LEHI, UT 84043	Ph: County: 25	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 12	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	2021	ROBERT M. HUNT HUNT'S PEST CONTROL 76 E STATE RD LEHI, UT 84043	Ph: 226-3449 County: 25	New: 7/01/82 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3 7	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	3593	PETER KYLE HUNTSMAN LONGVITY 2601 CINNEBAR DR SALT LAKE CITY, UT 84121	Ph: 944-9664 County: 18	New: 3/19/87 Renew: 3/04/94 Expires: 12/31/94	12/13/93 12/31/96	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	5819	MERRILL D. HUTCHISON PROVO PARKS & RECREATION 540 W 400 S PROVO, UT 84601	Ph: County: 25	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	1 3 5 12	COOK Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5187	JOSEPH A. HYDE J & L'S PO. BOX 54 SPRINGVILLE, UT 84663	Ph: County: 25	New: 3/08/93 Renew: 1/04/94 Expires: 12/31/94	3 3/08/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	8982	MARK W. HYLAND 439 GOOSENEST DR PAYSON, UT 84651	Ph: County: 25	New: 1/27/90 Renew: 1/02/94 Expires: 12/31/94	3 1/01/93 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9204	MATHEW D. HYLAND SLC/CO HEALTH 885 W RED OAKS DR MURRAY, UT 84123	Ph: 266-7585 County: 18	New: 1/22/91 Renew: 1/28/94 Expires: 12/31/96	3 12/21/93 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4910	ROY IRVING FOREVER GREEN YARD CARE 2770 W SWEET BASIL S BENNION, UT 84118	Ph: County: 18	New: 3/10/92 Renew: 1/04/94 Expires: 12/31/94	3 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	10000	ROBERT E ISRAELSON B & A YARDS & FLOWERS 6508 W. 3500 S WEST VALLEY CITY, UT 84120	Ph: 250-1723 County: 18	New: 1/11/94 Renew: 1/28/94 Expires: 12/31/94	3 1/11/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3005	LEONARD M. IVERSEN TRI-CARE SERVICES 247 S GLENDALE ST SALT LAKE CITY, UT 84104	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	3 3/16/93 12/31/95	12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	3776	WILLIAM E. JACOBS ALL SEASONS PEST CONTROL 2971 S 8850 W MAGNA, UT 84044	Ph: 250-0510 County: 18	New: 9/01/87 Renew: 1/28/94 Expires: 12/31/94	3 12/21/93 12/31/96	7 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1049	EARL JACOBSON 6036 JAMICA MURRAY, UT 84123	Ph: 266-2094 County: 18	New: 2/01/81 Renew: 1/28/94 Expires: 12/31/94	3 12/15/93 12/31/96		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9880	KARLA J. JAMES HEALTH DEPARTMENT 746 W 4800 S SPANISH FORK, UT 84660	Ph: County: 25	New: 5/12/93 Renew: 1/02/94 Expires: 12/31/94	3 5/12/93 12/31/95	8	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9794	MARTY JARAMILLO FRANKLIN QUEST 4041 W 5780 S KEARNS, UT 84118	Ph: 966-8338 County: 18	New: 3/23/93 Renew: 3/04/94 Expires: 12/31/94	3 3/23/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5525	BRIAN S. JENKINS GROUNDS CONTROL 3336 S W CREST RD #29 WEST VALLEY CITY, UT 84120	Ph: 968-5815 County: 18	New: 2/08/94 Renew: 3/18/94 Expires: 12/31/94	3 2/08/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5400	DOUG JENKINS ECOLAB 3158 W 8375 S WEST JORDAN, UT 84088	Ph:801 566-6186 County: 18	New: 7/29/93 Renew: 1/03/94 Expires: 12/31/94	7 7/29/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	3548	LYLE C. JENKINS 6843 S 3420 W WEST JORDAN, UT 84084	Ph: 969-1799 County: 18	New: 2/11/87 Renew: 1/28/94 Expires: 12/31/94	3 7 12/21/93 12/31/96		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4364	DONNA J. JENSEN STARLIGHT PEST CONTROL 5010 WHITE CHERRY WAY WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 3/12/90 Renew: 1/04/94 Expires: 12/31/94	7 1/01/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5052	GLENN E. F. JENSEN 6968 S 900 E MIDVALE, UT 84047	Ph: County: 18	New: 7/07/92 Renew: 1/04/94 Expires: 12/31/94	7 7/07/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	8621	LYNN H. JENSEN 3286 N 2200 W SALT LAKE CITY, UT 84116	Ph: 596-2029 County: 18	New: 4/26/88 Renew: 1/28/94 Expires: 12/31/96	5 12/15/93 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	10041	RANDY JENSEN SALT LAKE COUNTY 1130 W 4873 S MURRAY, UT 84123	Ph: 268-8106 County: 18	New: 2/15/94 Renew: 3/18/94 Expires: 12/31/96	3 2/15/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3827	ROGER D. JENSEN STARLIGHT PEST 5010 WHITE CHERRY WAY WEST VALLEY CITY, UT 84120	Ph: 964-1985 County: 18	New: 2/08/88 Renew: 1/04/94 Expires: 12/31/94	7 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	10001	NEAL L. JESSUP PARKS & REC 3012 CONSTUTION WEST VALLEY CITY, UT 84119	Ph: 974-5856 County: 18	New: 1/04/94 Renew: 2/25/94 Expires: 12/31/94	3 1/04/74 12/31/94		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5433	TODD V. JEX CHEMLAWN 618 OAKLEY ST #B206 SALT LAKE CITY, UT 84116	Ph:801 596-3449 County: 18	New: 9/14/93 Renew: 1/03/94 Expires: 12/31/94	3 9/14/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4195	GARY L. JOHNSON ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 5/03/89 Renew: 2/11/94 Expires: 12/31/94	7 12/18/91 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	10042	KEVIN JOHNSON FAA 522 E CLOVERWOOD CIR DRAPER, UT 84020	Ph: 572-2149 County: 18	New: 2/22/94 Renew: 3/18/94 Expires: 12/31/96	3 2/22/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5557	PHIL V. JOHNSON AE POWELL & SONS 5580 S 4270 W KEARNS, UT 84118	Ph: 568-6707 County: 18	New: 3/01/94 Renew: 3/11/94 Expires: 12/31/94	3 3/01/94 12/31/96		CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	3720	RAYMOND D. JOHNSON ASPLUNDH TREE CO 588 N 550 W OREM, UT 84057	Ph: 225-4783 County: 25	New: 6/10/87 Renew: 1/03/94 Expires: 12/31/94	6 7/27/93 12/31/95		COOK Duly Licensed As A Commercial Pesticide Applicator
4001	2327	ROB JOHNSON GARDENSIDE SPRAYING SERV. 5801 S JAMIAH DR MURRAY, UT 84123	Ph: County: 18	New: 1/01/83 Renew: 1/03/94 Expires: 12/31/94	1 3 7 12/12/91 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9949	ROBERT L. JOHNSON 271 N 100 E AMERICAN FORK, UT 84003	Ph:801 756-3651 County: 25	New: 10/28/93 Renew: 1/01/94 Expires: 12/31/94	3 10/28/93 12/31/95		COOK, DARRELL Duly Licensed As A Non Commercial Pesticide Applicator
4001	3142	JOSEPH E. JOHNSTON 6911 S 2700 W WEST JORDAN, UT 84084	Ph: County: 18	New: 6/01/85 Renew: 1/03/94 Expires: 12/31/94	3 6 1/01/93 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9403	VINT M. JOLLEY UVCC 267 S 500 E PAYSON, UT 84651	Ph: 423-2249 County: 25	New: 7/30/91 Renew: 1/28/94 Expires: 12/31/96	3 12/08/93 12/31/96		COOK Duly Licensed As A Non Commercial Pesticide Applicator
4001	5317	KENNETH JONES CHEMLAWN 869 E CHARIOT DR SANDY, UT 84094	Ph: 255-7553 County: 18	New: 4/20/93 Renew: 1/03/94 Expires: 12/31/94	3 7 12/31/92 12/31/95		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3818	KIM JONES CEDAR POINTE 10184 ALTAVILLA DR SANDY, UT 84092	Ph: 942-4297 County: 18	New: 1/14/88 Renew: 1/01/94 Expires: 12/31/94	7 1/01/92 12/31/94		CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
EXP 4002	9951	JOHN JONKMAN 1236 HUNT RD SALT LAKE CITY, UT 84117	Ph:801 565-3181 County: 18	New: 11/02/93 Renew: 1/02/94 Expires: 12/31/93	7 11/02/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	8866	JEFFERY DUSTIN JOSEPHSON PO BOX 16189 SALT LAKE CITY, UT 84113	Ph: County: 18	New: 5/03/89 Renew: 1/01/94 Expires: 12/31/94	8 5/03/93 12/31/95		WILLARDSON Duly Licensed As A Non Commercial Pesticide Applicator
4002	9092	JOHN JUSTIN LONE PEAK STATE NURSERY 1184 E TURQUOISE WAY SANDY, UT 84094	Ph: County: 18	New: 5/08/90 Renew: 1/01/94 Expires: 12/31/94	2 3 1/01/93 12/31/95		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	5149	KIMO C. KALAMA VALLEY TURF MAINTENANCE 448 E 780 N OREM, UT 84057	Ph: County: 25	New: 2/05/93 Renew: 1/04/94 Expires: 12/31/94	2/05/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4471	LYNN KANO 2858 E WILLOW CREEK DR SANDY, UT 84093	Ph: County: 18	New: 5/02/90 Renew: 1/01/94 Expires: 12/31/94	5/24/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	10034	LEON F. KARTCHNER MURRAY CITY PARKS & REC 822 E 4200 S MURRAY, UT 84107	Ph: 266-6202 County: 18	New: 2/08/94 Renew: 2/25/94 Expires: 12/31/96	2/08/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7992	DIANE KEAY SLC CO. HEALTH DEPT 276 'B' ST SALT LAKE CITY, UT 84103	Ph: County: 18	New: 12/17/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	7 8 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1838	MARK F. KEHL LAWN TECH 814 W GERMANIA AVE MURRAY, UT 84123	Ph: 969-6499 County: 18	New: 1/01/82 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9687	DALE KELLER SLC/COUNTY HEALTH DEPT 610 S 100 E SALT LAKE CITY, UT 84111	Ph: County: 18	New: 12/15/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4661	GARY SCOTT KELLER MODERN MECH. 571 E COATSVILLE AVE SALT LAKE CITY, UT 84105	Ph: 485-5302 County: 18	New: 4/05/91 Renew: 2/11/94 Expires: 12/31/94	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9941	WAYNE KELLY SLC PARKS DEPT 5838 COUNTY HILLS DR SALT LAKE CITY, UT 84118	Ph: 966-8640 County: 18	New: 9/30/93 Renew: 1/02/94 Expires: 12/31/94	9/30/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9661	JOHN R. KEMP SANDY CITY PARKS DEPT 11214 SANDY CREEK DR SANDY, UT 84094	Ph: County: 18	New: 8/25/92 Renew: 1/01/94 Expires: 12/31/94	8/25/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9852	KENNETH C. KERN III 360 E HUBBARD AVE SALT LAKE CITY, UT 84111	Ph: County: 18	New: 5/11/93 Renew: 1/01/94 Expires: 12/31/94	5/11/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4916	DOUGLAS D. KEYSER FREDERICO LANDSCAPING INC 290 W 300 N OREM, UT 84057	Ph: County: 25	New: 3/17/92 Renew: 3/11/94 Expires: 12/31/94	1/01/92 12/31/94	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	9910	ROBERT E. KING APHIS 1860 W ALEXANDER ST #B WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 6/16/93 Renew: 1/01/94 Expires: 12/31/94	6/16/93 12/31/95	9		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5111	NAN KIRKPATRICK KELLY GREEN LAWN CARE 43 N 300 W AMERICAN FORK, UT 84003	Ph: County: 25	New: 12/01/92 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	3001	ROBERT O. KIRKPATRICK KELLY GREEN LAWN CARE 43 N 300 W AMERICAN FORK, UT 84003	Ph: County: 25	New: 3/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	5184	DENNIS M KIYOGUCHI SALT LAKE MOSQUITO ABATE. 981 MCCLELLAND ST SALT LAKE CITY, UT 84105	Ph: County: 18	New: 3/01/85 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	8 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4192	DARREN KNUDSEN R&R PEST CONTROL 3917 S RIVERTRAIL T 1015 SALT LAKE CITY, UT 84123	Ph: County: 18	New: 5/03/89 Renew: 2/11/94 Expires: 12/31/94	4/17/92 12/31/94	3 6 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4549	RUSSELL O. KOCHERHANS BLUE DIAMOND PEST CONTROL PO BOX 1143 SALT LAKE CITY, UT 84121	Ph: County: 18	New: 8/20/90 Renew: 1/04/94 Expires: 12/31/94	2/09/93 12/31/95	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	8881	DAN KOSTER 965 s 50 W OREM, UT 84058	Ph: County: 25	New: 5/17/89 Renew: 1/03/94 Expires: 12/31/94	6/22/92 12/31/94	2		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1052	JARET R. KRANZ ECONO PEST COMPANY 1865 E 1700 S SALT LAKE CITY, UT 84108	Ph: County: 18	New: 3/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 8		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5401	JEFFREY A. KUDDES TRUGREEN 3985 S 4000 W #B WEST VALLEY CITY, UT 84119	Ph:801 968-8191 County: 18	New: 7/27/93 Renew: 1/28/94 Expires: 12/31/94	7/27/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4153	ROSS D. JR. KUMP 9477 S HIGH MEADOW DR SOUTH JORDAN, UT 84065	Ph: 262-4602 County: 18	New: 4/04/89 Renew: 1/28/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4969	JERRY LABRUM LABRUM LANDSCAPING 3435 W BURREY CT SALT LAKE CITY, UT 84119	Ph: County: 18	New: 4/14/92 Renew: 1/01/94 Expires: 12/31/94	4/14/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	7416	FRANK L. LACOX U.D.O.T. 9446 S 1700 W RIVERTON, UT 84065	Ph: 254-4344 County: 18	New: 4/08/91 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	6	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	10020	CHUCK E. LADY STOUFFERS FOODS 1498 S 600 E SPRINGVILLE, UT 84663	Ph: 489-6638 County: 25	New: 2/11/94 Renew: 2/18/94 Expires: 12/31/96	2/11/94 12/31/96	7	COOK, DARRELL
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3286	FREDERICK H. LAMBERT LAWN LIFE 3559 S 6830 W WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 2/27/86 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9225	MARK E. LAMBOURNE SLC PARKS DEPT 754 PARKER LN SALT LAKE CITY, UT 84106	Ph: 486-0226 County: 18	New: 2/19/91 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9510	STEVE LAND SALT LAKE CITY CORP 7143 S 2780 E SALT LAKE CITY, UT 84121	Ph: County: 18	New: 3/19/92 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	8456	MARK DAVID LANDEEN 2906 W 7500 S WEST JORDAN, UT 84084	Ph: 561-3875 County: 18	New: 6/10/87 Renew: 1/01/94 Expires: 12/31/94	6/09/92 12/31/94	2 6	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9530	RON LARSEN MURRAY CITY PARK 2417 EVERETTWOOD DR WEST JORDAN, UT 84084	Ph: County: 18	New: 3/24/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5478	RONALD ARNE LARSEN 1749 W CRYSTAL ROCK AVE SALT LAKE CITY, UT 84116	Ph: 359-5269 County: 18	New: 12/21/93 Renew: 2/25/94 Expires: 12/31/94	12/21/93 12/31/96	3	CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	9948	TERRIE E LARSEN QUALITY FLOWERS & PLANTS 2420 S 900 S SALT LAKE CITY, UT 84106	Ph: 801 467-1123 County: 18	New: 10/05/93 Renew: 1/01/94 Expires: 12/31/94	10/05/93 12/31/95	3	CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3880	WENDELL LARSEN YARD CONTROL CO. 9686 SITZMARK DR SANDY, UT 84092	Ph: 571-0685 County: 18	New: 3/11/88 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	2398	STEPHEN LEAK VALLEY GREEN LANDSCAPE 1586 E STRATFORD AVE SALT LAKE CITY, UT 84106	Ph: County: 18	New: 3/01/84 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5410	MARK A. LEAMON CHEMLAWN 7447 S 2405 W WEST JORDAN, UT 84084	Ph:801 569-1568 County: 18	New: 8/05/93 Renew: 1/28/94 Expires: 12/31/94	8/05/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4095	SCOTT C. LEE 1203 CLUBHOUSE DR #2923 SALT LAKE CITY, UT 84123	Ph: County: 18	New: 3/13/89 Renew: 1/01/94 Expires: 12/31/94	12/18/91 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	3160	RICK LEPLEY 652 E WILSON AVE SALT LAKE CITY, UT 84105	Ph: 467-4178 County: 18	New: 6/01/85 Renew: 1/28/94 Expires: 12/31/94	1/01/93 12/31/95	3 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5415	PRESTON I. LEWIS TRULY NOLAN PEST CONTROL 2183 S NEVADA AVE #2 PROVO, UT 84601	Ph:801 236-4116 County: 25	New: 8/24/93 Renew: 1/03/94 Expires: 12/31/94	8/24/93 12/31/95	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9678	DALE F. LIECHTY UT DIV OF WILDLIFE RES 1200 N OLDWILLOW LN PROVO, UT 84604	Ph: County: 25	New: 12/01/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	5 6	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	1761	DENNIS D. LINNELL 2988 E KEMPNER RD SALT LAKE CITY, UT 84109	Ph: County: 18	New: 5/01/81 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	3 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	4660	MARK C. LITTLEFIELD PROVO CITY PARKS 5392 S 3200 W LAKESHORE, UT 84660	Ph: County: 25	New: 1/01/83 Renew: 1/28/94 Expires: 12/31/96	1/28/94 12/31/96	3	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4973	BRUCE LLOYD SCENIC PROPERTY MAINTENAN 4566 W 4985 S KEARNS, UT 84118	Ph: County: 18	New: 4/07/92 Renew: 1/04/94 Expires: 12/31/94	4/07/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5150	DAVID LLOYD 2424 TRUST 1269 E WALDEN LN DRAPER, UT 84020	Ph: County: 18	New: 2/23/93 Renew: 1/03/94 Expires: 12/31/94	2/23/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4974	MARION LLOYD PRECISION PROPERTY MAINTA 1674 PAULISTA WAY SANDY, UT 84093	Ph: County: 18	New: 4/21/92 Renew: 1/01/94 Expires: 12/31/94	4/21/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5320	SHELDON L. LONGHURST 625 S 600 E #3 SALT LAKE CITY, UT 84102	Ph: County: 18	New: 5/24/93 Renew: 1/03/94 Expires: 12/31/94	5/24/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	5249	LARRY ANTHONY LOPEZ QUESTA LANDSCAPE CONSTRUC 3082 W 8450 S WEST JORDAN, UT 84088	Ph: County: 18	New: 4/13/93 Renew: 1/03/94 Expires: 12/31/94	4/13/93 12/31/95	6		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4792	JUEL LOTT 348 BELVIEW MURRAY, UT 84107	Ph: 266-0382 County: 18	New: 8/06/91 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9967	TROY LOTT PROVO CITY 398 S 1920 W PROVO, UT 84601	Ph: 375-5825 County: 25	New: 12/08/93 Renew: 2/11/94 Expires: 12/31/96	1/01/94 12/31/96	3		COOK, DARRELL
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9576	BRENT LOVELAND WEST VALLEY CITY CORP 3130 S 4000 W WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 5/12/92 Renew: 1/03/94 Expires: 12/31/94	5/12/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	10017	DANIEL S. LOZANO SANDY CITY PARKS 8556 SUSAN WAY WEST JORDAN, UT 84088	Ph: 569-1521 County: 18	New: 1/18/94 Renew: 2/11/94 Expires: 12/31/96	1/18/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5472	TORY LUBLIN BLUE DIAMOND 7220 S 700 E MIDVALE, UT 84047	Ph: 255-1276 County: 18	New: 2/01/94 Renew: 2/11/94 Expires: 12/31/94	2/01/93 12/31/96	7		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	9693	GORDON LUND SL COUNTY HEALTH 1056 HILLVIEW SALT LAKE CITY, UT 84124	Ph: County: 18	New: 12/15/92 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	8 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	2912	JEFF LUND WESTCO 2643 W HARVEST LN WEST JORDAN, UT 84084	Ph: County: 18	New: 8/01/84 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9968	KENT LYMAN UTAH VALLEY COMM. COLLEGE 334 S 1065 W OREM, UT 84058	Ph: County: 25	New: 12/08/93 Renew: 1/28/94 Expires: 12/31/96	12/08/93 12/31/96	3		WILSON, DAVID
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4597	GENE B. LYON ECOLAB 6113 S HAZELHURST DR SALT LAKE CITY, UT 84118	Ph: County: 18	New: 1/29/91 Renew: 2/11/94 Expires: 12/31/94	12/21/93 12/31/96	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2350	EARLE MACDUFF A & J TREE SERVICE 1822 W 14200 S BLUFFDALE, UT 84065	Ph: County: 18	New: 1/01/84 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	1055	JAMES A. MACDUFF A & J TREE SERVICE 1822 W 14200 S BLUFFDALE, UT 84065	Ph: County: 18	New: 3/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3577	JAMES ALEXANDER MACDUFF DIAMOND TREE/PEST CONTROL 300 FERN CIR MIDVALE, UT 84047	Ph: 568-0587 County: 18	New: 2/18/87 Renew: 2/11/94 Expires: 12/31/94	1/01/93 12/31/96	3 6 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9891	MICHAEL D. MADSEN SLC MOSQUITO ABATEMENT 5557 S 5180 W KEARNS, UT 84118	Ph: County: 18	New: 6/22/93 Renew: 1/01/94 Expires: 12/31/94	6/22/93 12/31/95	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5481	PAUL MAESE JEREMY RANCH 2575 E 4500 S SALT LAKE CITY, UT 84124	Ph: 277-3182 County: 18	New: 12/28/93 Renew: 3/04/94 Expires: 12/31/94	12/28/93 12/31/96	3 12		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	8463	ANDREW J. MANZANARES U OF U GROUNDS DEPT 3410 S 6400 W WEST VALLEY CITY, UT 84120	Ph: 583-2362 County: 18	New: 7/07/87 Renew: 1/02/94 Expires: 12/31/94	9/14/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9552	MICHAEL R. MARETT SANDY CITY 9120 S 700 E SANDY, UT 84070	Ph: County: 18	New: 4/21/92 Renew: 1/03/94 Expires: 12/31/94	4/21/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	5107	LEWIS J MARROTT UTAH MOSQUITO 7446 S 2000 W SPANISH FORK, UT 84660	Ph: County: 25	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	7/23/92 12/31/94	8 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	2360	TERRY ALLEN MARTIN LAWNLIFE 4388 HIGHLAND DR #5 SALT LAKE CITY, UT 84124	Ph: County: 18	New: 1/01/84 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9720	GILBERT MARTINEZ HOUSING AUTHORITY SLC 1776 SW TEMPLE ST SALT LAKE CITY, UT 84116	Ph: County: 18	New: 2/02/93 Renew: 1/02/94 Expires: 12/31/94	2/02/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4029	DAVID MASTEN BEST DEFENSE - PEST CTRL 817 RED OAKS DR MURRAY, UT 84123	Ph: County: 18	New: 9/06/88 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1671	BRAD G. MATTINSON MATTINSON PEST CONTROL 526 S 300 W PAYSON, UT 84651	Ph: 465-3781 County: 25	New: 2/01/82 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	4207	STEPHEN R. MATTINSON MATTINSON PEST CONTROL 664 E 200 N SPANISH FORK, UT 84660	Ph: 798-9092 County: 25	New: 5/03/89 Renew: 1/02/94 Expires: 12/31/94	3/11/93 12/31/95	3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	2099	RUSSELL SHELDON MAUGHAN MAUSHAN'S LANDSCAPE 268 E 900 N SPANISH FORK, UT 84660	Ph: County: 25	New: 3/01/83 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 6		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4793	DAN MAY 9728 ALLISON CIR SANDY, UT 84070	Ph: 571-1579 County: 18	New: 7/23/91 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9892	HEATHER MCBRIDE MAGNA MOSQUITO ABATEMENT 8173 ARMORIDGE CIR MAGNA, UT 84044	Ph: County: 18	New: 6/15/93 Renew: 1/02/94 Expires: 12/31/94	6/15/93 12/31/95	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	3050	KIM MCBRIDE LAWN WORKS PO BOX 1050 WEST JORDAN, UT 84084	Ph: County: 18	New: 4/01/85 Renew: 1/04/94 Expires: 12/31/94	4/03/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9335	MELISSA MCBRIDE MAGNA MOSQUITO ABATEMENT 8173 ARMORIDGE CIR MAGNA, UT 84044	Ph: 250-8452 County: 18	New: 6/04/91 Renew: 1/28/94 Expires: 12/31/96	12/21/93 12/31/96	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9679	CHRIS MCCLELLAN GLADSTON GOLF COURSE 431 E 450 S SANTAQUIN, UT 84655	Ph: County: 25	New: 12/01/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8535	RONALD D. MCDADE OREM CITY 145 E 1020 N OREM, UT 84057	Ph: 226-0942 County: 25	New: 2/08/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5272	MICHAEL K. MCKAY LAWN TECH 723 MORNING DEW DR SALT LAKE CITY, UT 84123	Ph: County: 18	New: 4/27/93 Renew: 1/02/94 Expires: 12/31/94	4/27/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1894	R. DOUGLAS MCKAY CHEM LAWN 6360 HEUGHS CANYON DR SALT LAKE CITY, UT 84121	Ph: 943-0249 County: 18	New: 3/01/82 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1566	HAROLD MCKINLEY A ACTION PEST CONTROL 1550 ALDER RD MURRAY, UT 84123	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	2138	MICHAEL MCKINNON 370 E SCOTT AVE SALT LAKE CITY, UT 84115	Ph: County: 18	New: 3/01/83 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9481	BILL MCNATT UNIVERSITY STUDENT APTS. 1348 S 300 E SALT LAKE CITY, UT 84115	Ph: County: 18	New: 2/24/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5014	DOUGLAS J MCPHEE 3915 W 4955 S KEARNS, UT 84118	Ph: County: 18	New: 4/21/92 Renew: 1/02/94 Expires: 12/31/94	4/21/92 12/31/94			CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5534	LYNN MECHAM RODS LAWN CARE & PEST CTR 379 N 200 W SANTAQUIN, UT 84655	Ph: 754-3000 County: 25	New: 2/25/94 Renew: 3/11/94 Expires: 12/31/94	2/25/94 12/31/96	3 7		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4001	5535	RAYMOND D. MECHAM ROD'S PEST CONTROL 2182 W 4600 S SPANISH FORK, UT 84660	Ph: 798-2558 County: 25	New: 2/25/94 Renew: 3/11/94 Expires: 12/31/94	2/25/94 12/31/96	3 7		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4001	4718	RON MEMMOTT GREEN MACHINE 740 S MAIN ST PAYSON, UT 84651	Ph: 438-2344 County: 25	New: 5/02/91 Renew: 1/28/94 Expires: 12/31/94	4/17/91 12/31/96	3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4466	EDWIN H. MEONO ECOLAB 3327 W 5900 S BENNION, UT 84118	Ph: County: 18	New: 5/02/90 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5492	PAUL C. MERK TRUE GREEN 75 W PLUMTREE LN #12A SALT LAKE CITY, UT 84047	Ph: 567-9089 County: 18	New: 2/08/94 Renew: 2/25/94 Expires: 12/31/94	2/08/94 12/31/96	3		MERK, PAUL C.
Duly Licensed As A Commercial Pesticide Applicator								
4001	3372	DON R. MILLER ENVIRONMENTAL MANAGEMENT 9015 S MICHAEL WAY SANDY, UT 84092	Ph: County: 18	New: 4/17/86 Renew: 3/11/94 Expires: 12/31/94	2/01/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	8691	F. DEAN MINER JR. UTAH COOPERATIVE EXTEN. 1166 S GENEVA RD OREM, UT 84058	Ph: County: 25	New: 6/29/88 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	10		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	5116	KENNETH L MINSON SALT LAKE MOSQUITO 3278 PINON PL SALT LAKE CITY, UT 84121	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	7567	OSCAR MISAKA AGRIDYNE TECHNOLOGIES INC 5765 NENA WAY MURRAY, UT 84107	Ph: County: 18	New: 1/01/83 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9797	MARVIN DEAN MOEN SLC CORP 3075 SUSSEX PLACE WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 4/06/93 Renew: 1/01/94 Expires: 12/31/94	4/06/93 12/31/95	6	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3879	ROSS C. MONTAGUE CHEMLAWN 2694 E 7800 S SALT LAKE CITY, UT 84123	Ph: County: 18	New: 3/11/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5107	EUNICE JANE MONTRONE A1 EXTERMINATORS 4430 W 4955 S KEARNS, UT 84118	Ph: County: 18	New: 11/03/92 Renew: 1/03/94 Expires: 12/31/94	11/03/92 12/31/95	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1166	VETO R. MONTRONE A-1 EXTERMINATORS 4430 W 4955 S KEARNS, UT 84118	Ph: County: 18	New: 3/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4376	DAVID MOODY 388 E 6220 S MURRAY, UT 84107	Ph: County: 18	New: 3/12/90 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	3 6 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	8215	ROBERT MOORE UTAH WOOD PRESERVING PO BOX 57247 SALT LAKE CITY, UT 84157	Ph: County: 18	New: 11/14/86 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	7	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9667	SHARI R. MORA 562 N SIR PATRICK DR SALT LAKE CITY, UT 84116	Ph: County: 18	New: 10/13/92 Renew: 1/03/94 Expires: 12/31/94	10/13/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7370	GARRY J. MORAN VA HOSPITAL 1251 HARRIS AVE SALT LAKE CITY, UT 84104	Ph: 974-5607 County: 18	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3 7	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3137	JOHN MORGAN 4785 S DESERT DUSK RD TAYLORSVILLE, UT 84118	Ph: County: 18	New: 6/01/85 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	2316	SHANE P. MORRIS % JEFF ORR 290 W 500 S OREM, UT 84058	Ph: 673-0916 County: 25	New: 9/01/83 Renew: 2/11/94 Expires: 12/31/94	4/27/93 12/31/95	3 7	CAMPBELL
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	4871	DARIN NERDIN CHEMLAWN 5137 S JEDEDIAH DR KEARNS, UT 84118	Ph: County: 18	New: 2/24/92 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9799	RONALD L. NEWBY SLC CORP (AIRPORT) 4560 CHARLES WAY WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 4/06/93 Renew: 1/01/94 Expires: 12/31/94	4/06/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1066	ROGER V. NICHOLLS 427 E 6210 S MURRAY, UT 84107	Ph: County: 18	New: 12/01/80 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3 6 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5297	DAVE NIELSEN SCIENTIFIC LANDSCAPE 944 N CORNELL ST #D SALT LAKE CITY, UT 84116	Ph: County: 18	New: 3/09/93 Renew: 1/04/94 Expires: 12/31/94	3/09/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9054	BLAIN R. NIELSON MOUNTAIN VIEW GOLF COURSE 808 W 1340 N PROVO, UT 84604	Ph: County: 25	New: 4/07/90 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9697	CRAIG V. NIELSON UT STATE FAIRPARK 3831 W RIVENDELL RD BENNION, UT 84118	Ph: County: 18	New: 12/18/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	3256	TODD NIELSON LAWN MAX 7452 JEFFERSON RD MAGNA, UT 84044	Ph: 250-5658 County: 18	New: 10/25/85 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5536	AARON NILSEN 1920 WESTMINSTER AVE SALT LAKE CITY, UT 84108	Ph: 487-4687 County: 18	New: 2/21/94 Renew: 3/11/94 Expires: 12/31/94	2/21/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	8968	SCOTT J. NOEL 1068 E ROOSEVELT SALT LAKE CITY, UT 84105	Ph: County: 18	New: 12/29/89 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	10013	KENNETH E. NOFFSINGER UNIVERSITY OF UTAH 123 M ST SALT LAKE CITY, UT 84103	Ph: 532-6749 County: 18	New: 1/11/94 Renew: 1/28/94 Expires: 12/31/94	1/11/94 12/31/96	3 7		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5537	JERRY W. NORTH LAWN LIFE 2679 GLENMARE ST SALT LAKE CITY, UT 84106	Ph: 486-1976 County: 18	New: 2/22/94 Renew: 3/11/94 Expires: 12/31/94	2/22/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	1069	JOHN D. NORTON DAVEY TREE CO. 14995 S 1800 W BLUFFDALE, UT 84065	Ph: 254-2917 County: 18	New: 7/05/91 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4096	CHARLIE O'CONNOR CHEMLAWN 2163 E 4070 S SALT LAKE CITY, UT 84123	Ph: County: 18	New: 3/13/89 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9499	MICHAEL F. O'CONNOR SALT LAKE CITY CORP. 1047 BRIARCLIFF SALT LAKE CITY, UT 84116	Ph: County: 18	New: 2/24/92 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8967	BLAINE OAKESON 1132 W GLOVER LN FARMINGTON, UT 84025	Ph: 451-6013 County: 18	New: 12/29/89 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	10		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5493	DAVID OCHOA TERMINIX 4770 BON AIR ST #14 SALT LAKE CITY, UT 84117	Ph: 272-3741 County: 18	New: 1/25/94 Renew: 2/25/94 Expires: 12/31/94	1/25/94 12/31/96	7		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	7774	KLAUS D. OEFELE SLC PARKS 4490 S 1300 W MURRAY, UT 84123	Ph: County: 18	New: 3/01/85 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9170	KOREY Y. OFFRETT PROVO CITY CORPORATION 2077 W 1600 N PROVO, UT 84604	Ph: County: 25	New: 9/14/90 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4900	ELI T. OLIVE 3201 S 300 W SALT LAKE CITY, UT 84115	Ph: County: 18	New: 3/03/92 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2251	JON ERIK OLSEN WASATCH EXTERMINATORS 3678 BRIGHTON POINT DR SALT LAKE CITY, UT 84121	Ph: 943-4334 County: 18	New: 6/01/83 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	3 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	10046	LARRY CHAD OLSEN SLC MOSQUITO ABATEMENT 11250 S 1700 W SOUTH JORDAN, UT 84095	Ph: 254-7234 County: 18	New: 3/08/94 Renew: 3/18/94 Expires: 12/31/96	3/08/94 12/31/96	8		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1194	ROBERT L. OLSEN WASATCH EXTERMINATORS 3678 BRIGHTON POINT DR SALT LAKE CITY, UT 84121	Ph: 943-9574 County: 18	New: 1/01/82 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	10		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code Inspector
4002	9162	JOHN C. OLSON METZ BAKING CO. 1557 E SHAWSAN CIR SANDY, UT 84092	Ph: County: 18	New: 8/22/90 Renew: 1/01/94 Expires: 12/31/94	7 11/02/93 12/31/95	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4283	HENRY R. ORTEGA 509 E LELAND AVE SALT LAKE CITY, UT 84106	Ph: County: 18	New: 8/25/89 Renew: 1/28/94 Expires: 12/31/94	3 1/01/92 12/31/94	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5539	RAYMOND OSBORN NATURE GRO 374 E 11TH AVE SALT LAKE CITY, UT 84103	Ph: 521-7239 County: 18	New: 3/01/94 Renew: 3/18/94 Expires: 12/31/94	3 3/01/94 12/31/96	CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	4982	DOUGLAS M. OSTLUND LAWN GRO 3363 S 1300 E #364 SALT LAKE CITY, UT 84117	Ph: 485-5146 County: 18	New: 3/31/92 Renew: 3/11/94 Expires: 12/31/94	3 3/08/94 12/31/96	CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4001	5155	KELLY J. PACKER 8128 W DANBURY DR MAGNA, UT 84044	Ph: County: 18	New: 3/09/93 Renew: 2/11/94 Expires: 12/31/94	7 3/09/93 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5352	WIN PACKER UTAH SPRAYING SERVICE 1612 E 8685 S SANDY, UT 84093	Ph: 255-2037 County: 18	New: 6/22/93 Renew: 1/04/94 Expires: 12/31/94	3 6/22/93 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	4585	SCOTT PARKER 1905 BRANDON PARK TERRACE SANDY, UT 84094	Ph: 969-3497 County: 18	New: 2/05/91 Renew: 3/11/94 Expires: 12/31/94	3 2/15/94 12/31/96	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	10047	STEVE C. PARKINSON LDS CHURCH 3843 S 3520 W WEST VALLEY CITY, UT 84119	Ph: 968-6952 County: 18	New: 3/01/94 Renew: 3/18/94 Expires: 12/31/96	3 3/01/94 12/31/96	CRITCHFIELD, ROSS Duly Licensed As A Non Commercial Pesticide Applicator
4002	9293	RONALD L. PARSONS SALT LAKE CITY PARKS DEPT 2245 MCCLELLAND SALT LAKE CITY, UT 84106	Ph: 466-4217 County: 18	New: 4/22/91 Renew: 1/28/94 Expires: 12/31/96	3 12/15/93 12/31/96	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5039	MICHAEL PATEY TERMINIX 1613 W 4300 S TAYLORSVILLE, UT 84123	Ph: County: 18	New: 6/09/92 Renew: 2/11/94 Expires: 12/31/94	7 6/09/92 12/31/94	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5382	ROBERT PATEY TERMINIX 1613 W 4300 S SALT LAKE CITY, UT 84123	Ph: 801 266-8750 County: 18	New: 6/29/93 Renew: 2/11/94 Expires: 12/03/94	7 12/31/92 12/31/95	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	1595	WILLIAM D. PATTON CHEM LAWN 5505 W 4260 S WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2356	H. EUGENE PAULSEN II. PAULSEN'S PEST CONTROL 1624 S LAKEWOOD DR OREM, UT 84058	Ph: County: 25	New: 1/01/84 Renew: 3/04/94 Expires: 12/31/94	3/23/92 12/31/94	3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	1148	HAROLD E. PAULSEN PAULSENS PEST CONTROL 1587 W 950 N PROVO, UT 84601	Ph: County: 25	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3 7 12		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	8209	SCOTT C. PEARSON STOUFFER FROZEN FOODS 2345 E 7200 S SPANISH FORK, UT 84660	Ph: County: 25	New: 10/10/86 Renew: 1/02/94 Expires: 12/31/94	4/29/93 12/31/95	7		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5226	BLAINE PEEK ORKIN 840 N 1700 S #13 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 3/25/93 Renew: 1/04/94 Expires: 12/31/94	3/25/93 12/31/95	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	10009	JASON L. PERKINS U OF U 4453 THORNWOOD AVE SALT LAKE CITY, UT 84123	Ph: 265-7870 County: 18	New: 2/25/94 Renew: 2/11/94 Expires: 12/31/96	2/25/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7417	MARION DRELL PERRY UNIVERSITY OF UTAH 351 UTOPIA AVE SALT LAKE CITY, UT 84115	Ph: County: 18	New: 1/01/83 Renew: 2/25/94 Expires: 12/31/96	2/08/94 12/31/96	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9818	TIM PERSONS UNIVERSITY OF UTAH 3426 BURREY CT WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 4/20/93 Renew: 1/03/94 Expires: 12/31/94	4/20/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9921	BRANDON PETERSON SL CTY MOSQUITO ABATEMENT 4188 W 5780 S KEARNS, UT 84118	Ph: 801 968-5130 County: 18	New: 6/29/93 Renew: 1/01/94 Expires: 12/31/94	6/29/93 12/31/95	8		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8568	QUAIN PETERSON UTAH PARKS & REC. 12640 S 950 E DRAPER, UT 84020	Ph: 572-2247 County: 18	New: 3/11/88 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3 12		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4668	RICK PIERCE AFFORDABLE PEST CONTROL 1010 S 800 W SALT LAKE CITY, UT 84104	Ph: 972-1722 County: 18	New: 4/05/91 Renew: 2/11/94 Expires: 12/31/94	9/15/92 12/31/94	2 3 6 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	2237	RICHARD L. PITZAK RIDDIT 667 SIR MICHAEL SALT LAKE CITY, UT 84116	Ph: County: 18	New: 5/01/83 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5494	BRENT A. PIXTON HIDDEN VALLEY COUNTRY CLU 1075 E CASTLE ROCK RD SANDY, UT 84094	Ph: 571-3982 County: 18	New: 2/08/94 Renew: 3/11/94 Expires: 12/31/94	2/08/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4001	5118	RONALD JAY POPE SPENCER LAWN CARE 475 E 520 N AMERICAN FORK, UT 84003	Ph: County: 25	New: 12/31/92 Renew: 2/11/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	9712	SUSAN POPE U OF U 875 E 7905 S SANDY, UT 84070	Ph: County: 18	New: 12/15/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9801	ANTHONY J. PORCELLI SLC CORP (AIRPORT) 3028 WINCHESTER DR WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 4/06/93 Renew: 1/03/94 Expires: 12/31/94	4/06/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	2981	PAUL M. PORTER 4181 W 5780 S KEARNS, UT 84118	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	2972	WILLIAM PORTER SCIENTIFIC LANDSCAPE 2548 W 9435 S SOUTH JORDAN, UT 84065	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	2/09/93 12/31/95	3 5		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1348	J. JAMES POULSON LAWN GRO 2497 E CAMPUS DR SALT LAKE CITY, UT 84121	Ph: County: 18	New: 1/01/83 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4020	JOHN POULSON LAWN GRO 2497 E CAMPUS SALT LAKE CITY, UT 84121	Ph: County: 18	New: 9/06/88 Renew: 1/02/94 Expires: 12/31/94	3/24/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9896	RICHARD POULSON PROVO RIVER WATER USERS 1875 S STATE #1100 OREM, UT 84058	Ph: County: 25	New: 6/11/93 Renew: 1/01/94 Expires: 12/31/94	6/11/93 12/31/95	5 6 0		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9681	JERRY PREISENDORF PROVO CITY 2203 N 600 W LEHI, UT 84043	Ph: County: 25	New: 12/01/92 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9498	MICHAEL T. PRICE SALT LAKE CITY CORP. 811 N SONATA ST SALT LAKE CITY, UT 84116	Ph: County: 18	New: 2/24/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5301	MARC PUCKETT UTAH SPRAYING SERVICE 11494 S SANDY CREEK DR SANDY, UT 84094	Ph: County: 18	New: 5/11/93 Renew: 1/04/94 Expires: 12/31/94	5/11/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5383	MARK J. PYPER PENNOCK PEST CONTROL 1168 W 300 N SALT LAKE CITY, UT 84116	Ph:801 532-7313 County: 18	New: 7/13/93 Renew: 2/11/94 Expires: 12/31/94	12/31/92 12/31/95	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	3557	ROBERT H. QUENTIN EAGLEGATE INC 1259 E SIESTA DR SANDY, UT 84093	Ph: 943-5932 County: 18	New: 2/11/87 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3 12	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	8469	CAROLE QUILTER GALLIVAN UTAH CENTER PLZA 1127 E PRINCETON AVE SALT LAKE CITY, UT 84105	Ph: 359-2208 County: 18	New: 7/07/87 Renew: 1/03/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7572	EVAN LEIGH QUILTER 951 N 350 E OREM, UT 84057	Ph: 377-5241 County: 25	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3 5 6	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7209	MARK QUILTER 1017 E 500 N LEHI, UT 84043	Ph: County: 25	New: 1/01/83 Renew: 1/01/94 Expires: 12/31/94	4/06/93 12/31/95	1 3 5 7 10 12	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9803	CHAD A. RAPPLEYE SO. SL MOSQUITO ABATEMENT 7351 S 3085 E SALT LAKE CITY, UT 84121	Ph: County: 18	New: 3/30/93 Renew: 1/01/94 Expires: 12/31/94	3/30/93 12/31/95	8	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	10012	GARY E. RATLIFF CITY/COUNTY HEALTH DEPT 2895 1/2 S MCCLELLAND SALT LAKE CITY, UT 84106	Ph: 487-2559 County: 18	New: 12/28/93 Renew: 2/11/94 Expires: 12/31/96	12/28/93 12/31/96	7	CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3275	ALAN F. RAUH NUTRA SYSTEMS LAWN CARE 1364 E 11205 S SANDY, UT 84092	Ph: County: 18	New: 2/05/86 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4055	BRYCE C. RAWLINGS RAWLINGS LAWN & PEST CTRL 601 E BRIDGER LN ELK RIDGE, UT 84651	Ph: County: 25	New: 1/01/89 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3 7 12	COOK
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	1670	MAX D. READING BIO-DYNAMIC LAWN & GARDEN 5379 ALPINE DR MURRAY, UT 84107	Ph: County: 18	New: 2/01/81 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5542	CHARLES G. RHODES CHEMLAWN 303 S 13TH E #5 SALT LAKE CITY, UT 84102	Ph: 582-4945 County: 18	New: 2/15/94 Renew: 3/11/94 Expires: 12/31/94	2/15/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4001	4233	JOHN RHODES 1155 E 3745 S SALT LAKE CITY, UT 84106	Ph: County: 18	New: 5/31/89 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3973	DAVID R. RICHINS DAVEY TREE 393 E 400 N AMERICAN FORK, UT 84003	Ph: County: 25	New: 6/10/88 Renew: 3/11/94 Expires: 12/31/94	3/04/94 12/31/96	6 7		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4001	2958	LAGRAND RICHINS DAVEY TREE EXPERT CO. 251 S 300 E AMERICAN FORK, UT 84003	Ph: County: 25	New: 3/01/85 Renew: 2/11/94 Expires: 12/31/94	5/14/93 12/31/95	6 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4906	ERIC RITZ MOUNTAIN VIEW LAWN 555 N 500 E #18 PROVO, UT 84606	Ph: 373-3191 County: 25	New: 3/03/92 Renew: 2/18/94 Expires: 12/31/94	3/16/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4516	GREGORY M. ROACH BUFFO'S TERMITE PEST CTRL 945 E 80 N SPRINGVILLE, UT 84663	Ph: County: 25	New: 6/13/90 Renew: 1/28/94 Expires: 12/31/94	6/16/93 12/31/95	3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4002	8538	JOHN R. ROBBINS 1260 E HILLSIDE DR PLEASANT GROVE, UT 84062	Ph: County: 25	New: 2/17/90 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5543	KARMA ROBERTS UNIVERSITY PARK ASSOC 996 E 200 S OREM, UT 84058	Ph: 226-0875 County: 25	New: 2/25/94 Renew: 3/11/94 Expires: 12/31/94	2/25/94 12/31/96	3		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4002	5691	DOUGLAS M ROBINSON UT WILDLIFE RESOURCES 1000 N MAIN ST SPRINGVILLE, UT 84663	Ph: 489/4421 County: 25	New: 6/20/91 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3 5 6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	1532	TERRY H. ROBISON R & R PEST CONTROL 1144 COUNTRY PARK COVE SOUTH JORDAN, UT 84065	Ph: 261-2848 County: 18	New: 3/01/85 Renew: 2/11/94 Expires: 12/31/94	4/17/92 12/31/94	1 2 3 5 6 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	1364	RONALD L. RODGERS R & R PEST CONTROL 3122 SWEET BLOSSOM DR SOUTH JORDAN, UT 84065	Ph: County: 18	New: 1/01/83 Renew: 2/11/94 Expires: 12/31/94	3 7 4/17/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9462	ROBERT ROGALSKI LDS HOSPITAL 6200 S 2715 E SALT LAKE CITY, UT 84121	Ph: 272-2365 County: 18	New: 1/04/92 Renew: 1/28/94 Expires: 12/31/96	3 12/15/93 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7778	CHRISTOPHER ROHR SLC PARKS 760 KENSINGTON AVE SALT LAKE CITY, UT 84105	Ph: County: 18	New: 3/01/85 Renew: 1/02/94 Expires: 12/31/94	3 1/01/93 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	2086	GARY D. ROMANO LAWN LIFE 4581 PALMER DR WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 2/01/83 Renew: 2/11/94 Expires: 12/31/94	3 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5424	LLOY ROMRELL LDS CHURCH 50 E N TEMPLE ST SALT LAKE CITY, UT 84150	Ph:801 967-6561 County: 18	New: 8/31/93 Renew: 2/11/94 Expires: 12/31/94	3 8/31/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1145	BRAD ROSENHAN R & R PEST CONTROL 526 JACKSON ST MIDVALE, UT 84047	Ph: County: 18	New: 4/14/92 Renew: 2/11/94 Expires: 12/31/94	7 4/14/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4984	BRYAN ROSENHAN R AND R PEST CONTROL 526 JACKSON ST MIDVALE, UT 84047	Ph: County: 18	New: 1/14/92 Renew: 2/11/94 Expires: 12/31/94	3 7 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4575	GARY L. ROSIER GREAT BASIN TURF 2644 W TONI LEE ST WEST JORDAN, UT 84088	Ph: County: 18	New: 12/28/90 Renew: 1/28/94 Expires: 12/31/94	10 1/01/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1151	DONALD M. ROWBERRY ROWBERRY & SONS TERMITE/P 1717 W 80 S PROVO, UT 84601	Ph: County: 25	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	3 7 1/01/93 12/31/95		COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	4985	THOMAS R. ROWLEY CHEMLAWN 2072 E SUNNYSIDE AVE SALT LAKE CITY, UT 84108	Ph: County: 18	New: 3/24/92 Renew: 2/11/94 Expires: 12/31/94	3 3/24/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5558	BRADLEY ROYLANCE SNARR BROTHERS 4870 S 300 W MURRAY, UT 84107	Ph: 485-0715 County: 18	New: 1/04/94 Renew: 3/18/94 Expires: 12/31/96	3 7 1/04/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	8754	DUANE RUBINK USDA/ADC 1545 E SUCCESS LN SANDY, UT 84092	Ph: County: 18	New: 3/13/89 Renew: 1/01/94 Expires: 12/31/94	1/01/92 9 12/31/94		CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	4133	BRETT RUDY 2481 MOCKINGBIRD CIR WEST VALLEY CITY, UT 84119	Ph: 964-8010 County: 18	New: 4/04/89 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	6019	ROGER M. RUFF MOUNTAIN DELL GOLF COURSE 1464 E VINEYARD SALT LAKE CITY, UT 84106	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12 12/31/95	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	9721	WILLIAM S. RUGGERO AGRI DYNE TECHNOLOGIES 1405 UTAHNA DR SALT LAKE CITY, UT 84104	Ph: County: 18	New: 2/02/93 Renew: 1/01/94 Expires: 12/31/94	2/02/93 12/31/95	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5159	JAMES H. RUSHTON 4896 ROYAL ANN DR SALT LAKE CITY, UT 84120	Ph: County: 18	New: 3/02/93 Renew: 2/11/94 Expires: 12/31/94	3/03/93 12/31/95	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	5254	DEAN J. RUSSELL ORKIN 840 W 1700 S #13 SALT LAKE CITY, UT 84104	Ph: County: 18	New: 4/06/93 Renew: 2/11/94 Expires: 12/31/94	4/06/93 12/31/95	7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	1464	DOUG P. RYAN 6047 S 700 W MURRAY, UT 84107	Ph: County: 18	New: 4/01/84 Renew: 1/04/94 Expires: 12/31/94	12/18/92 12/31/95	3 7 12	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	4373	P. BOYD SABIN FRUIT TREE SERVICE 517 S 1600 E SPANISH FORK, UT 84660	Ph: County: 25	New: 3/12/90 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	3	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	5544	ADAM SADLER TAYLOR'S TREE SURGERY 2751 S 8800 W MAGNA, UT 84044	Ph: 250-6908 County: 18	New: 3/01/94 Renew: 3/11/94 Expires: 12/31/94	3/01/94 12/31/96	3	CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	9503	GREGORY S. SANDBERG VALLEY VIEW GOLF COURSE 2501 E GENTILE LAYTON, UT 84040	Ph: County: 18	New: 3/03/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4002	8702	GUADALUPE SANTANA NPI 61 W MEADOW LN SANDY, UT 84070	Ph: County: 18	New: 7/27/88 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	2339	DANIEL SARACINO PAY LESS PEST CONTROL 1600 W 4300 S SALT LAKE CITY, UT 84123	Ph: County: 18	New: 11/01/83 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	4440	DOUGLAS I. SCHMID LAWN LIFE 5973 S TARRAGON CT SALT LAKE CITY, UT 84118	Ph: 969-6316 County: 18	New: 4/08/90 Renew: 2/11/94 Expires: 12/31/94	5/04/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1414	ROD F. SCHRAMM ROD'S PEST CONTROL 11874 S STATE ST PAYSON, UT 84651	Ph: County: 25	New: 1/01/85 Renew: 2/11/94 Expires: 12/31/94	1/27/93 12/31/95	1 3 5 7 8 12	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	9273	MARK SCHROEDER SANDY CITY 3843 MANHATTAN DR SALT LAKE CITY, UT 84120	Ph: 561-6711 County: 18	New: 4/05/91 Renew: 1/28/94 Expires: 12/31/96	12/21/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9240	EARL R. SCOTT SANDY CITY PARKS DEPT 11742 S 1430 W RIVERTON, UT 84065	Ph: 561-6709 County: 18	New: 3/20/91 Renew: 2/11/94 Expires: 12/31/96	12/21/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4214	CRAIG SEARLE UTAH COUNTY WEED CONTROL 324 W 1360 N AMERICAN FORK, UT 84003	Ph: County: 25	New: 5/17/89 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	1 2 3 5 6 7 8 12	COCK
Duly Licensed As A Commercial Pesticide Applicator							
4001	5032	MATTHEW SEEGMILLER WASATCH EXTERMINATORS 3678 BRIGHTON POINT DR SALT LAKE CITY, UT 84121	Ph: County: 18	New: 5/23/92 Renew: 1/04/94 Expires: 12/31/94	5/23/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9724	BRAD D. SELBY AGRIDYNE TECHNOLOGIES 2515 E BEACON DR SALT LAKE CITY, UT 84108	Ph: County: 18	New: 2/02/93 Renew: 1/02/94 Expires: 12/31/94	2/02/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3026	DOUGLAS J. SERBOUSEK SCIENTIFIC LANDSCAPE 6519 S CLERNATES CIR WEST JORDAN, UT 84084	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	2/09/93 12/31/95	3 5	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5021	JAIME SERRATO SOLID CONSTRUCTORS 6333 W WENDING LN SALT LAKE CITY, UT 84120	Ph: County: 18	New: 5/12/92 Renew: 3/11/94 Expires: 12/31/94	5/12/92 12/31/94	3 6	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	2103	JOHN MARK SERVOSS GREEN LEAF SPRAYING 4341 W 5335 S KEARNS, UT 84118	Ph: County: 18	New: 3/01/83 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

UTAH DEPARTMENT OF AGRICULTURE
Licenses

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector	
4001	5277	WILLIAM T. SESSIONS LAWNLIFE 341 E 3155 S #1 SALT LAKE CITY, UT 84115	Ph: 268-9956 County: 18	New: 4/27/93 Renew: 3/11/94 Expires: 12/31/94	4/27/93 12/31/95	3	CRITCHFIELD	
Duly Licensed As A Commercial Pesticide Applicator								
4001	5546	TINA SEVERNAK ALL GREEN 3453 W 6975 S WEST JORDAN, UT 84084	Ph: 969-1265 County: 18	New: 3/08/94 Renew: 3/11/94 Expires: 12/31/94	3/08/94 12/31/96	3	CRITCHFIELD, ROSS	
Duly Licensed As A Commercial Pesticide Applicator								
4002	9167	DOUGLAS S. SHOBER MAGNA MOSQUITO ABATEMENT PO BOX 40 MAGNA, UT 84044	Ph: County: 18	New: 9/14/90 Renew: 1/28/94 Expires: 12/31/94	7/06/93 12/31/95	8	CRITCHFIELD	
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5547	DANIEL C. SHREWSBURY TERMINEX 4227 W 5740 S KEARNS, UT 84118	Ph: 966-4559 County: 18	New: 3/08/94 Renew: 3/11/94 Expires: 12/31/94	3/08/94 12/31/96	7	CRITCHFIELD, ROSS	
Duly Licensed As A Commercial Pesticide Applicator								
4001	5105	DARWIN K. SMITH A TO Z AFFILIATED 4407 CHERRY VIEW SALT LAKE CITY, UT 84120	Ph: County: 18	New: 10/27/92 Renew: 1/04/94 Expires: 12/31/94	10/27/92 12/31/94	7	CRITCHFIELD	
Duly Licensed As A Commercial Pesticide Applicator								
4002	7465	DENNIS S. SMITH PROVO CITY PARKS 1057 S 930 W PAYSON, UT 84651	Ph: 379-6606 County: 25	New: 2/01/83 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3 5	COOK	
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	3683	JOHN A. (MIKE) SMITH TURF DOCTOR 3206 KAIBAB WAY SALT LAKE CITY, UT 84109	Ph: 487-6894 County: 18	New: 4/28/87 Renew: 2/11/94 Expires: 12/31/94	12/21/93 12/31/96	3	CRITCHFIELD	
Duly Licensed As A Commercial Pesticide Applicator								
4002	9706	KELLY D. SMITH OREM CITY 1068 N 1160 W OREM, UT 84057	Ph: 224-6347 County: 25	New: 2/08/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3	COOK	
Duly Licensed As A Non Commercial Pesticide Applicator								
EXP	4002	9251	LOUIS S. SMITH OAKRIDGE COUNTRY CLUB 2510 E GREGSON AVE SALT LAKE CITY, UT 84109	Ph: 467-1109 County: 18	New: 3/20/91 Renew: 1/01/94 Expires: 12/31/93	4/27/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5475	DANIEL C. SNARR SNARR BROTHERS INC 4870 S THIRD W MURRAY, UT 84107	Ph: 268-6055 County: 18	New: 1/04/94 Renew: 2/18/94 Expires: 12/31/94	1/04/94 12/31/96	3 7	CRITCHFIELD, ROSS	
Duly Licensed As A Commercial Pesticide Applicator								
4001	4619	RON SNARR SNARR BROTHERS 1353 RAMONA AVE SALT LAKE CITY, UT 84105	Ph: 487-5068 County: 18	New: 2/12/91 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3 7 12	CRITCHFIELD	
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4001	5443	KENT SORENSEN 3861 CHALLERLEIGH RD WEST VALLEY CITY, UT 84120	Ph: 801 967-3678 County: 18	New: 10/19/93 Renew: 1/04/94 Expires: 12/31/94	10/19/93 12/31/95	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9450	KIM SORENSEN MURRAY CITY PARKS DEPT. 779 SHADOW WOOD MURRAY, UT 84123	Ph: County: 18	New: 1/04/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94			CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8610	CHARLES SORGE UT. STATE PARKS & REC. 2200 S FOOTHILL DR #G223 SALT LAKE CITY, UT 84109	Ph: 531-9226 County: 18	New: 4/06/88 Renew: 1/04/94 Expires: 12/31/94	2/19/92 12/31/94	3		WILSON
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8897	PAUL C. SPADAFORA 3041 N CHEROKEE LN PROVO, UT 84604	Ph: County: 25	New: 6/21/89 Renew: 1/01/94 Expires: 12/31/94	4/08/92 12/31/94	6		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5120	FRED J. SPENCER SPENCER LAWN CARE 815 E GROVECREEK DR PLEASANT GROVE, UT 84062	Ph: County: 25	New: 12/31/92 Renew: 2/11/94 Expires: 12/31/94	1/01/93 12/31/95	3		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	3514	TOM L. SPERRY 2842 S 2855 W WEST VALLEY CITY, UT 84119	Ph: County: 18	New: 10/10/86 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	5550	BRAD STEBLE LAWNLIFE 3616 DOVER HILL DR SALT LAKE CITY, UT 84121	Ph: 943-7971 County: 18	New: 2/22/94 Renew: 3/11/94 Expires: 12/31/94	2/22/94 12/31/96	3		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator								
4002	5153	WAYNE STEELE OREM CITY 226 W 570 N OREM, UT 84057	Ph: 225-5547 County: 25	New: 4/01/84 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4222	LINCOLN M. STEVENS 741 PARKER LN SALT LAKE CITY, UT 84106	Ph: 484-6036 County: 18	New: 5/17/89 Renew: 1/04/94 Expires: 12/31/94	6/22/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	1190	BRYCE E. STEWART STEWART'S PEST CONTROL 488 W 2000 S OREM, UT 84058	Ph: 226-2261 County: 25	New: 1/01/82 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3 7 12		COOK
Duly Licensed As A Commercial Pesticide Applicator								
4001	4848	MIKE STEWART STEWART'S PO BOX 1865 OREM, UT 84059	Ph: County: 25	New: 1/22/92 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	1 3 7		COOK
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	9650	NYLE STEWART MOSQUITOS ABATEMENT 659 N 300 W SPANISH FORK, UT 84660	Ph: County: 25	New: 7/23/92 Renew: 1/01/94 Expires: 12/31/94	7/23/92	8		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	7558	KENNETH STIRLAND MURRAY CITY CORP 1180 W 6600 S MURRAY, UT 84123	Ph: 268-4106 County: 18	New: 1/01/83 Renew: 1/28/94 Expires: 12/31/96	12/21/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4852	RICHARD LEE STRACK R & M PEST CONTROL 1354 TEAKWOOD DR MURRAY, UT 84123	Ph: County: 18	New: 1/21/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3 7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9155	JANET STREBEL UTAH COUNTY MOSQUITO ABTM 12225 S 5200 W SPRING LAKE, UT 84651	Ph: County: 25	New: 11/28/90 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4989	DAYLE B. STREET 5390 S APPIAN WAY TAYLORSVILLE, UT 84118	Ph: County: 18	New: 4/07/92 Renew: 2/18/94 Expires: 12/31/94	4/07/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3203	GORDON D. STRONG CHEMLAWN 5633 S TREEBEARD KEARNS, UT 84118	Ph: 966-2067 County: 18	New: 8/01/85 Renew: 1/04/94 Expires: 12/31/94	1/01/93 12/31/95	3 7 12		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	3813	STEPHEN M. STRONG ECO-LAB 3072 W 8375 S WEST JORDAN, UT 84084	Ph: 569-0161 County: 18	New: 1/13/88 Renew: 1/28/94 Expires: 12/31/94	1/01/92 12/31/94	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4001	4802	SEAN SULLIVAN GREEN KING PO BOX 57791 MURRAY, UT 84157	Ph: 269-1575 County: 18	New: 8/20/91 Renew: 1/04/94 Expires: 12/31/94	3/02/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	7363	ALAN P. SUNDQUIST OREM CITY 790 W 10 N LINDON, UT 84042	Ph: 224-6347 County: 25	New: 2/08/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	10049	DAVID B. TATE UTAH ROSES 10289 S GOLDEN WILLOW DR SANDY, UT 84070	Ph: 572-0314 County: 18	New: 12/28/93 Renew: 3/18/94 Expires: 12/31/96	1/01/94 12/31/96	3		
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4990	ALBERT D. TAYLOR TAYLORS TREE SURGERY 6102 S 4000 W KEARNS, UT 84118	Ph: 359-4327 County: 18	New: 6/01/84 Renew: 2/11/94 Expires: 12/31/94	3/31/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4001	5496	BRADLEY S. TAYLOR TRUE GREEN 6448 S TRESA DR WEST JORDAN, UT 84084	Ph: 966-7272 County: 18	New: 2/15/94 Renew: 3/11/94 Expires: 12/31/94	2/15/94 12/31/96	3	CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	5551	BRIGHAM TAYLOR TURF PLUS 883 E 700 N PROVO, UT 84604	Ph: 373-4542 County: 25	New: 3/04/94 Renew: 3/11/94 Expires: 12/31/94	3/04/94 12/31/96	3	COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator							
4001	5060	JAMES E. TERMEER ARBOR CARE 1157 S 300 E SALT LAKE CITY, UT 84111	Ph: County: 18	New: 6/30/92 Renew: 2/11/94 Expires: 12/31/94	6/30/92 12/31/94	3 7	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	1916	SIDNEY KIM TERRY TERRY SPRAYING 4890 W JANETTE AVE WEST VALLEY CITY, UT 84120	Ph: 969-9229 County: 18	New: 4/01/82 Renew: 1/28/94 Expires: 12/31/94	12/15/93 12/31/96	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9970	BRIAN J. THACKER UT DIV OF WILDLIFE RESOUR 13714 S 1875 W RIVERTON, UT 84065	Ph: 254-0916 County: 18	New: 12/08/93 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	6	COOK, DARRELL
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9828	NICK THAYNE SALT LAKE PARKS & REC 2265 FOOTHILL DR SALT LAKE CITY, UT 84109	Ph: County: 18	New: 3/16/93 Renew: 1/01/94 Expires: 12/31/94	3/16/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3829	AARON K. THOMPSON LAWN LIFE 4162 PARK GREEN 10A WEST VALLEY CITY, UT 84120	Ph: 968-5058 County: 18	New: 2/08/88 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	8561	DAVID THORNWALL CEREAL FOOD PROCESSORS 425 W 500 S SALT LAKE CITY, UT 84101	Ph: 801 255-0960 County: 18	New: 3/11/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	7	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3465	ROBERT TILLOTSON FOUR SEASONS LAWN & YARD 569 S 400 W PROVO, UT 84601	Ph: County: 25	New: 7/02/86 Renew: 2/11/94 Expires: 12/31/94	7/17/92 12/31/94	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	8969	RYAN TIMONEY 9890 SEGO LILY DR SANDY, UT 84094	Ph: County: 18	New: 12/29/89 Renew: 1/03/94 Expires: 12/31/94	1/01/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4673	JAMES L. TINDALL LAWNS COMPLETE PO BOX 3 SPRINGVILLE, UT 84663	Ph: 489-7792 County: 25	New: 4/05/91 Renew: 2/25/94 Expires: 12/31/94	12/21/93 12/31/96	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	10028	JOSEPH TODD PIONEER TRAIL STATE PARK 6033 S LONGMORE DR KEARNS, UT 84118	Ph: County: 18	New: 5/04/93 Renew: 2/25/94 Expires: 12/31/94	5/04/93 12/31/95	1 3	CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9587	THOMAS L. TOWNSEND JR UT STATE LANDS & FORESTRY 7200 S 316 E MIDVALE, UT 84047	Ph: County: 18	New: 2/11/92 Renew: 1/01/94 Expires: 12/31/94	2/11/92 12/31/94		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	5193	LARRY L. TRUESDELL CONTINENTAL BAKING CO. 734 E 400 S SALT LAKE CITY, UT 84102	Ph: 969-9095 County: 18	New: 5/01/82 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	7 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9778	NATALIE A. TRULSON 3343 W CROWN ST SALT LAKE CITY, UT 84118	Ph: County: 18	New: 3/11/93 Renew: 1/01/94 Expires: 12/31/94	3/11/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	4330	JOHN J. TUCKER TUCKER LAWN CARE 1066 N 440 W OREM, UT 84057	Ph: County: 25	New: 2/06/90 Renew: 2/18/94 Expires: 12/31/94	1/01/93 12/31/95	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4002	9456	TIMOTHY C. TUCKER LEHI ROLLER MILLS 200 N 203 W #3 AMERICAN FORK, UT 84003	Ph: County: 25	New: 1/04/92 Renew: 1/02/94 Expires: 12/31/94	1/01/92 12/31/94	7	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9668	DENNIS R. TURNER 841 SHERMAN AVE SALT LAKE CITY, UT 84105	Ph: County: 18	New: 10/13/92 Renew: 1/01/94 Expires: 12/31/94	10/13/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	2166	LARON UNCK LANDSCAPE MANAGEMENT SER. 9280 S 2490 W WEST JORDAN, UT 84088	Ph: County: 18	New: 3/01/83 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5350	DENNIS V. UNDERWOOD LAWN LIFE 4325 S 4580 W WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 5/18/93 Renew: 2/11/94 Expires: 12/31/94	5/18/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	2387	JOHN S. UNDERWOOD LAWN LIFE 4325 S 4580 W WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 3/01/84 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5209	PETELO VAKE PETE'S LANDSCAPING 3211 S 4100 W SALT LAKE CITY, UT 84120	Ph: County: 18	New: 3/23/93 Renew: 1/04/94 Expires: 12/31/94	3/23/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	10006	DARRELL VALBURG SLC PARKS & REC-GLENDALE 173 FIRST AVE #60 SALT LAKE CITY, UT 84103	Ph: 533-0715 County: 18	New: 12/16/93 Renew: 1/28/94 Expires: 12/31/94	12/16/93 12/31/96	3	PARKER, CURTIS Duly Licensed As A Non Commercial Pesticide Applicator
4002	9707	MARTIN VAN NOOD UTAH LAWN COMPANY, THE 165 E 2400 S SALT LAKE CITY, UT 84115	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	5	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	2348	DAVID VAN SLOOTEN WILDERNESS LANDSCAPING 2590 VERONA CIR HOLLADAY, UT 84117	Ph: County: 18	New: 1/01/84 Renew: 2/18/94 Expires: 12/31/94	1/01/92 12/31/94	3 7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	4008	EDDIE VIGIL ALL IN ONE 274 GARFIELD AVE SALT LAKE CITY, UT 84115	Ph: County: 18	New: 7/27/88 Renew: 1/04/94 Expires: 12/31/94	1/01/92 12/31/94	6 7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4002	9716	LONNIE W. WACK MURRAY CITY PARKS DEPT 5926 S 620 E MURRAY, UT 84107	Ph: County: 18	New: 12/15/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3 12	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5086	STERLING R. WADLEY 161 E 100 S PLEASANT GROVE, UT 84062	Ph: County: 25	New: 9/30/92 Renew: 2/11/94 Expires: 12/31/94	9/30/92 12/31/94	3	COOK Duly Licensed As A Commercial Pesticide Applicator
4001	5457	MICHAEL JASON WAGNER UTAH SPRAYING SERVICE 10738 S 455 E SANDY, UT 84070	Ph:801 571-4317 County: 18	New: 10/12/93 Renew: 1/01/94 Expires: 12/31/94	10/12/93 12/31/96	3	CRITCHFIELD, ROSS Duly Licensed As A Commercial Pesticide Applicator
4002	5164	KEITH H WAGSTAFF SALT LAKE MOSQUITO 2424 E SUNDOWN AVE SALT LAKE CITY, UT 84121	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8 12	CRITCHFIELD Duly Licensed As A Non Commercial Pesticide Applicator
4001	5096	TYLER WAKERLIG 5011 S COPEHART ST KEARNS, UT 84118	Ph: County: 18	New: 9/08/92 Renew: 3/11/94 Expires: 12/31/94	9/08/92 12/31/94	3 7	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3039	JAMES WALDRON LAWN & LEAF CO. 8339 S ARGENTA DR WEST JORDAN, UT 84088	Ph: County: 18	New: 4/01/85 Renew: 1/02/94 Expires: 12/31/94	3/31/92 12/31/94	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator
4001	3025	DENNIS WALKER SCIENTIFIC LANDSCAPE 4468 JARRAH ST SALT LAKE CITY, UT 84123	Ph: County: 18	New: 3/01/85 Renew: 1/04/94 Expires: 12/31/94	3/09/93 12/31/95	3	CRITCHFIELD Duly Licensed As A Commercial Pesticide Applicator

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9703	STEVEN R. WALKER NIBLEY PARK GOLF COURSE 4341 W 5015 S SALT LAKE CITY, UT 84118	Ph: County: 18	New: 12/18/92 Renew: 1/02/94 Expires: 12/31/94	3 12 12/31/95		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3618	DONALD WALLACE WALLACE PEST CONTROL 1182 S 1300 W SALT LAKE CITY, UT 84104	Ph: 297-2118 County: 18	New: 3/19/87 Renew: 3/11/94 Expires: 12/31/94	3 7 3/23/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5260	KENNETH D. WALLACE PO BOX 701201 WEST VALLEY CITY, UT 84120	Ph: County: 18	New: 4/13/93 Renew: 2/11/94 Expires: 12/31/94	3 7 4/13/93 12/31/95		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5552	BRYAN WARD SYSCO FOODS 1317 W THACKIE CIR SALT LAKE CITY, UT 84104-2937	Ph: 975-0507 County: 18	New: 1/09/94 Renew: 3/18/94 Expires: 12/31/94	7 12 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	1697	DERRAL C. WARNER 485 E 720 S SPANISH FORK, UT 84660	Ph: County: 25	New: 1/01/81 Renew: 1/01/94 Expires: 12/31/94	10 1/01/93 12/31/95		COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5476	JANETT WARNER U OF U GROUNDS 3793 W 12600 S RIVERTON, UT 84065	Ph: 254-6433 County: 18	New: 1/04/94 Renew: 2/11/94 Expires: 12/31/94	3 1/04/94 12/31/96		CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4001	4864	NATHAN B. WARNER SUMMERTIME LAWN CARE 815 TALISMAN DR SALT LAKE CITY, UT 84116	Ph: County: 18	New: 2/24/92 Renew: 2/11/94 Expires: 12/31/94	3 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9296	RODNEY B. WATERS SALT LAKE CITY PARKS DEPT 9462 S PINEDALE CIR SANDY, UT 84092	Ph: 943-2407 County: 18	New: 4/22/91 Renew: 1/28/94 Expires: 12/31/96	3 12/12/93 12/31/96		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3920	DAN WATSON ACE PEST CONTROL 5760 S WOOD CIR MURRAY, UT 84107	Ph: 250-9355 County: 18	New: 4/04/88 Renew: 1/02/94 Expires: 12/31/94	7 1/01/92 12/31/94		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4002	9420	ED WATSON URBAN FORESTRY 607 N SIR PATRICK DR SALT LAKE CITY, UT 84116	Ph: County: 18	New: 10/01/91 Renew: 2/11/94 Expires: 12/31/94	3 10/01/91 12/31/93		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	3904	GLENL A. WEAR JR. 52 E 700 N OREM, UT 84057	Ph: County: 25	New: 4/04/81 Renew: 1/28/94 Expires: 12/31/94	10 1/01/94 12/31/96		COOK
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification Categories	General Code	Inspector
4002	9231	BRUCE L. WELCH USFS SHRUB SCIENCES-PROVO 1061 W 860 N PROVO, UT 84606	Ph: 374-2945 County: 25	New: 2/20/91 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	2	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9722	SAMUEL A. WELLS AGIDYNE TECHNOLOGIES INC 2401 S FOOTHILL DR SALT LAKE CITY, UT 84109	Ph: County: 18	New: 2/02/93 Renew: 1/01/94 Expires: 12/31/94	2/02/93 12/31/95	2 3 5	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	5166	BOYD K. WENERSTROM SALT LAKE MOSQUITO PO BOX 367 MIDVALE, UT 84047	Ph: County: 18	New: 1/01/81 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	8 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	6026	STEVE L. WETHERELL 1460 W 2100 S SALT LAKE CITY, UT 84119	Ph: County: 18	New: 3/01/85 Renew: 1/02/94 Expires: 12/31/94	1/01/93 12/31/95	3 5 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5419	SONNY G. WHATCOTT QUALITY PLANTS & FLOWERS 1620 W WRIGHT CIR SALT LAKE CITY, UT 84104	Ph:801 979-0443 County: 18	New: 8/24/93 Renew: 2/11/94 Expires: 12/31/94	8/24/93 12/31/95	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							
4001	5553	STEVEN WHITAKER TRUGREEN 1096 MONTGOMERY ST SALT LAKE CITY, UT 84104	Ph: 975-6441 County: 18	New: 2/23/94 Renew: 3/11/94 Expires: 12/31/94	2/23/94 12/31/96	3	CRITCHFIELD, ROSS
Duly Licensed As A Commercial Pesticide Applicator							
4002	9717	JAMES T. WILEY SOUTH JORDAN CITY 4996 W CORIANDER KEARNS, UT 84118	Ph: County: 18	New: 12/15/92 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3 5 12	CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	9388	KENT C. WILKERSON UVCC 60 S 200 W SANTAQUIN, UT 84655	Ph: 754-5232 County: 25	New: 7/05/91 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4002	7361	BOYD L. WILKINS OREM CITY 194 W 300 S OREM, UT 84057	Ph: 224-7514 County: 25	New: 2/01/83 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	6	COOK
Duly Licensed As A Non Commercial Pesticide Applicator							
4001	5109	ELDON R.J. WILLES SPENCER LAWN COMPANY 852 E GROVE CREEK DR PLEASANT GROVE, UT 84062	Ph: County: 25	New: 12/31/92 Renew: 2/11/94 Expires: 12/31/94	1/01/93 12/31/95	3	COOK
Duly Licensed As A Commercial Pesticide Applicator							
4001	3935	ANN WILLIAMS PRIMARY CHILDREN'S 447 GOSHEN ST SALT LAKE CITY, UT 84104	Ph: 562-9141 County: 18	New: 4/26/88 Renew: 2/11/94 Expires: 12/31/94	1/01/92 12/31/94	3	CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator							

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	8026	STEVE WILLIAMS SLC CORPORATION 5103 S WANDER LAND SALT LAKE CITY, UT 84117	Ph: 277-0824 County: 18	New: 2/11/86 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	4678	DOUGLAS WILLIAMSON TERMINIX -SALT LAKE 1671 W THORNHILL DR #1609 SALT LAKE CITY, UT 84118	Ph: 965-9109 County: 18	New: 4/05/91 Renew: 1/28/94 Expires: 12/31/94	12/21/93 12/31/96	7		CRITCHFIELD
Duly Licensed As A Commercial Pesticide Applicator								
4002	9463	ANTHONY W. WILLIS UNIVERSITY OF UTAH 5202 COBBLE CREEK RD #7B SALT LAKE CITY, UT 84117	Ph: County: 18	New: 1/04/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9955	RANDALL A. WILLSON SALT LAKE CITY PARKS 1114 BRONZE LN SANDY, UT 84094	Ph:801 571-5608 County: 18	New: 11/16/93 Renew: 1/01/94 Expires: 12/31/94	11/16/93 12/31/95	3		CRITCHFIELD, ROSS
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	5025	DELOY G. WILSON COUNTRY CLUB, THE 4015 S 1100 E SALT LAKE CITY, UT 84124	Ph: County: 18	New: 3/01/85 Renew: 1/01/94 Expires: 12/31/94	1/01/93 12/31/95	3		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4001	5462	GARY R. WILSON SEED-N-GREEN 265 E 300 S #A LEHI, UT 84043	Ph: 768-4302 County: 25	New: 12/08/93 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4001	5463	RICHARD F WILSON SEED-N-GREEN 758 N 1000 E LEHI, UT 84043	Ph: 768-3800 County: 25	New: 12/08/93 Renew: 1/04/94 Expires: 12/31/94	12/08/93 12/31/96	3 7		COOK, DARRELL
Duly Licensed As A Commercial Pesticide Applicator								
4002	9435	BOYD WINN ALPINE SCHOOL DIST. PO BOX 329 LEHI, UT 84043	Ph: County: 25	New: 12/10/91 Renew: 3/11/94 Expires: 12/31/94	1/01/92 12/31/94	3 7 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9431	JAMES A. WINNAT 1515 BLUEMONT DR MURRAY, UT 84123	Ph: County: 18	New: 4/20/92 Renew: 1/01/94 Expires: 12/31/94	4/20/92 12/31/94	9		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	9196	JIM WINWARD UTAH WOOD PRESERVING PO BOX 57247 SALT LAKE CITY, UT 84157	Ph: County: 18	New: 12/21/90 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	7		CRITCHFIELD
Duly Licensed As A Non Commercial Pesticide Applicator								
4002	8679	MICHAEL W. WOOD U.S. FOREST SERVICE 62 N 200 E SALEM, UT 84653	Ph: County: 25	New: 6/10/88 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	2 6 12		COOK
Duly Licensed As A Non Commercial Pesticide Applicator								

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
4002	9619	MICHAEL G. WOODALL 926 RIVERBEND MURRAY, UT 84123	Ph: County: 18	New: 6/09/92 Renew: 1/01/94 Expires: 12/31/94	6/09/92 12/31/94	8		CRITCHFIELD
4001	1241	REX WOODHOUSE SPANISH FORK FLYING SVC 2300 N 300 W SPANISH FORK, UT 84660	Ph: 798-2051 County: 25	New: 7/05/91 Renew: 2/11/94 Expires: 12/31/94	12/08/93 12/31/96	11		COOK
4001	1094	THOMAS B WOODHOUSE SPANISH FORK FLYING SERVI 2300 N 300 W SPANISH FORK, UT 84660	Ph: 798-9888 County: 25	New: 2/01/82 Renew: 2/11/94 Expires: 12/31/94	12/08/93 12/31/96	11 12		COOK
4001	5555	MICHAEL KENT WOOLLEY BUFFI'S TERMITES & PEST 665 N 500 E #16 PROVO, UT 84606	Ph: 376-3276 County: 25	New: 2/17/94 Renew: 3/11/94 Expires: 12/31/94	2/17/94 12/31/96	3 7		COOK, DARRELL
4002	8500	BRENT D. WOOTTON SEVEN PEAKS RESORT 2052 S PACK ST PROVO, UT 84606	Ph: 835-1251 County: 25	New: 9/01/87 Renew: 1/04/94 Expires: 12/31/96	12/08/93 12/31/96	3		COOK
4001	4389	RANDY WORSLEY 805 E 3300 S #2 SALT LAKE CITY, UT 84106	Ph: County: 18	New: 3/23/90 Renew: 2/11/94 Expires: 12/31/94	3/16/93 12/31/95	3		CRITCHFIELD
4002	9989	RALPH B. WRIGHT 1820 E TEAKWOOD DR SANDY, UT 84092	Ph: 572-7975 County: 18	New: 12/15/93 Renew: 1/28/94 Expires: 12/31/96	12/15/93 12/31/96	3		CRITCHFIELD, ROSS
4001	5498	BRADLEY N. YATES CHEMLAWN 208 N CANYON RD #2 SALT LAKE CITY, UT 84103	Ph: 357-4913 County: 18	New: 2/08/94 Renew: 3/11/94 Expires: 12/31/94	2/08/94 12/31/96	3		CRITCHFIELD, ROSS
4002	9489	ROGER ZELLER UTAH VALLEY COMMUNITY 222 N 1200 W #95 CREM, UT 84057	Ph: County: 25	New: 2/24/92 Renew: 1/01/94 Expires: 12/31/94	1/01/92 12/31/94	3 12		COOK
4001	5211	DUANE D. ZELLMER LAWN LIFE 3816 S 2475 W SALT LAKE CITY, UT 84119	Ph: County: 18	New: 3/25/93 Renew: 1/04/94 Expires: 12/31/94	3/25/93 12/31/95	3		CRITCHFIELD
4001	5556	RONALD F. ZWICK LAWN LIFE 1036 NOCTURN DR SALT LAKE CITY, UT 84116	Ph: 363-1735 County: 18	New: 2/22/94 Renew: 3/11/94 Expires: 12/31/94	2/22/94 12/31/96	3		CRITCHFIELD, ROSS

Type	Number	Name	Phone/County	License	Certification	Categories	General Code	Inspector
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627 Licenses in list.

This list is sorted by NAME.

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APPENDIX B

CHAPTER 13

UTAH FERTILIZER ACT

4-13-1. Short title. This chapter shall be known and may be cited as the "Utah Fertilizer Act."

History: C. 1953, 4-13-1, enacted by L. 1979, ch. 2, § 14.

4-13-2. Definitions. As used in this chapter:

(1) "Adulterated fertilizer" means any commercial fertilizer which contains an ingredient that renders it injurious to beneficial plant life when applied in accordance with the directions on the label, or contains crop or weed seed, or is inadequately labeled to protect plant life.

(2) "Brand" means any term, design, or trade mark used in connection with one or several grades of commercial fertilizer or soil amendment.

(3) "Commercial fertilizer" means any substance which contains one or more recognized plant nutrients which is used for its plant nutrient content and is designed for use or claimed to have value in promoting plant growth, exclusive of unmanipulated animal and vegetable manures, marl, lime, limestone, wood ashes, gypsum, and other products exempted by regulation of the department.

(a) "Fertilizer material" means a commercial fertilizer which contains either:

(i) Quantities of no more than one of the primary plant nutrients (nitrogen, phosphoric acid and potash);

(ii) Approximately 85% plant nutrients in the form of a single chemical compound; or

(iii) Plant or animal residues or by-products, or a natural material deposit that is processed so that its primary plant nutrients have not been materially changed, except through purification and concentration.

(4) "Distributor" means any person who imports, consigns, manufactures, produces, compounds, mixes, or blends commercial fertilizer, or a person who imports, consigns, manufactures, produces, compounds, sizes, or blends a soil amendment; or who offers for sale, sells, barter, or otherwise supplies commercial fertilizer or a soil amendment in this state.

(5) "Grade" means the percentage of total nitrogen, available phosphorus or phosphoric acid, and soluble potassium or soluble potash stated in whole numbers in the same terms, order, and percentages as in the guaranteed analysis; provided, that specialty fertilizers may be guaranteed in fractional units of less than one percent of total nitrogen, available phosphorus or phosphoric acid, and soluble potassium or soluble potash and that fertilizer materials such as bone meal, manures, and similar raw materials may be guaranteed in fractional units.

(6) (a) "Guaranteed analysis" means the minimum percentage by weight of plant nutrients claimed in the following order and form:

Total nitrogen (N)	_____ percent
Available phosphoric acid (P ₂ O ₅)	_____ percent
Soluble potash (K ₂ O)	_____ percent

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(b) For unacidulated mineral phosphatic materials and basic slag, bone, tankage, and other organic phosphate materials, it means the total phosphoric acid and/or degree of fineness;

(c) Potential basicity or acidity expressed in terms of calcium carbonate equivalent in multiples of one hundred pounds per ton, when required by regulation.

Guarantees for plant nutrients other than nitrogen, phosphorus, and potassium may be permitted or required by regulation of the department. The guarantees for such other nutrients shall be expressed in the form of the element. The sources of such other nutrients (oxides, salt, chelates, etc.) may be required to be stated on the application for registration and may be included as a parenthetical statement on the label. Other beneficial substances or compounds, determinable by laboratory methods, also may be guaranteed by permission of the department. Any plant nutrients or other substances or compounds guaranteed are subject to inspection and analysis in accord with the methods and regulations prescribed by the department.

(7) "Investigational allowance" means an allowance for variations inherent in the taking, preparation, and analysis of an official sample of commercial fertilizer or soil amendment.

(8) "Label" means the display of all written, printed, or graphic matter upon the immediate container or statement accompanying a commercial fertilizer or soil amendment.

(9) "Labeling" means all written, printed, or graphic matter upon or accompanying any commercial fertilizer or soil amendment, or advertisements, brochures, posters, television and radio announcements used in promoting the sale of such commercial fertilizers or soil amendments.

(10) "Mixed fertilizer" means a commercial fertilizer containing any combination of fertilizer materials.

(11) "Official sample" means any sample of commercial fertilizer or soil amendment taken by the department and designated as "official."

(12) "Percent" or "percentage" means the percentage by weight.

(13) "Registrant" means any person who registers a commercial fertilizer or a soil amendment under the provisions of this chapter.

(14) "Soil amendment" means any substance that is intended to improve the physical characteristics of soil; except, commercial fertilizer, agriculture liming materials, unmanipulated animal manure, unmanipulated vegetable manure, pesticides, or other material exempted by regulation of the department.

(15) "Specialty fertilizer" means any commercial fertilizer distributed primarily for non-farm use, such as home gardens, lawns, shrubbery, flowers, golf courses, municipal parks, cemeteries, greenhouses, and nurseries.

(16) "Ton" means a net weight of two thousand pounds avoirdupois.

History: C. 1953, 4-13-2, enacted by L. 1979, ch. 2, § 14.

4-13-3. Distribution of commercial fertilizer or soil amendment — Registration required — Application — Fees — Expiration — Renewal — Exemptions specified — Blenders and mixers to register name under which business conducted — Blenders and mixers fee. (1) Each brand and grade of commercial fertilizer or soil amendment shall be registered in the name of the person whose name appears upon the label before being distributed in this state. The application for registration shall be submitted to the department on a form prescribed and

furnished by it, and shall be accompanied by a fee of not less than \$25 nor more than \$50 for each brand and grade. Upon approval by the department, a copy of the registration shall be furnished to the applicant. All registrations expire at midnight on December 31 of the year in which issued. Each registration is renewable for a period of one year upon the payment of an annual registration renewal fee in an amount equal to the current applicable original registration fee. Each renewal fee shall be paid on or before December 31 of each year.

(2) The application shall include the following information:

- (a) The net weight;
- (b) The brand and grade;
- (c) The guaranteed analysis;
- (d) The name and address of the registrant; and
- (e) Such other information as the department may prescribe by regulation.

(3) A distributor is not required to register any commercial fertilizer which has been registered by another person under this chapter if the label does not differ in any respect.

(4) A distributor is not required to register each grade of commercial fertilizer formulated by a consumer before mixing, but is required to register the name under which the business of blending or mixing is conducted and to pay an annual blenders license fee of not less than \$50 nor more than \$75 as prescribed by the department, and to label such mixed fertilizer or soil amendment as provided in section 4-13-4. A blenders license shall expire at midnight on December 31 of the year in which it is issued. A blenders license is renewable for a period of one year upon the payment of an annual license renewal fee in an amount equal to the current applicable original blenders license fee. Each renewal fee shall be paid on or before December 31 of each year.

History: C. 1953, 4-13-3, enacted by L. 1979, ch. 2, § 14.

4-13-4. Labeling requirements for specialty fertilizer, bulk commercial fertilizer, packaged mixed fertilizer, and soil amendments specified. (1) Each container of specialty commercial fertilizer distributed in this state shall bear a label setting forth:

- (a) Its net weight;
- (b) Brand and grade;
- (c) Guaranteed analysis;
- (d) The name and address of the registrant; and
- (e) The lot number.

(2) Each bulk shipment of commercial fertilizer distributed in this state shall be accompanied by a printed or written statement setting forth the information specified in (1) (a) through (d) of this section. The statement shall be delivered to the purchaser at the time the bulk fertilizer is delivered.

(3) Each sale of packaged mixed fertilizer shall be labeled, or labeling furnished the consumer, to show its net weight, guaranteed analysis, lot number, and the name and address of the distributor.

(4) Each container of soil amendment shall conform to the requirements of paragraph (1) of this section, and if distributed in bulk, with paragraph (2) of this section. In addition, the name or chemical designation and content of the soil amending ingredient or any other information prescribed by regulation of the department shall appear whether distributed in a container or in bulk.

History: C. 1953, 4-13-4, enacted by L. 1979, ch. 2, § 14.

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4-13-5. Enforcement — Inspection and samples authorized — Methods for sampling and analysis prescribed. (1) The department shall periodically sample, inspect, analyze, and test commercial fertilizers and soil amendments distributed within this state to determine if they comply with this chapter.

(2) Methods of analysis and sampling shall be in accordance with those adopted by the department from sources such as the Association of Official Analytical Chemists Journal.

(3) In determining whether a commercial fertilizer or soil amendment is deficient, the department shall be guided solely by the official sample.

(4) The department is authorized to enter any public or private premises or carriers during regular business hours in order to have access to commercial fertilizers or soil amendments subject to this chapter. If admittance is refused, the department may proceed immediately to obtain an ex parte warrant from the nearest court of competent jurisdiction to allow entry upon the premises for the purpose of making inspections and obtaining samples.

History: C. 1953, 4-13-5, enacted by L. 1979, ch. 2, § 14.

4-13-6. Distribution of fertilizers not complying with labeling requirements prohibited — Guaranteed analysis deficient — Penalty assessed — Time for payment — Court action to vacate or amend finding authorized. (1) No person shall distribute in this state a commercial fertilizer, fertilizer material, soil amendment or specialty fertilizer if the official sample thereof establishes that the commercial fertilizer, fertilizer material, soil amendment or specialty fertilizer is deficient in the nutrients guaranteed on the label by an amount exceeding the values established by regulation or if the overall index value of the official sample is below the level established by regulation.

(2) If an official sample, after analysis, demonstrates the guaranteed analysis is deficient in one or more of its primary plant foods (NPK) beyond the investigational allowance prescribed by regulation, or if the over-all index value of the official sample is below the level established by regulation, a penalty of three times the commercial value of the deficiency or deficiencies of the lot represented by the official sample may be assessed against the registrant.

(3) All penalties assessed under this section shall be paid to the department within three months after notice from the department.

(4) Any registrant aggrieved by the finding of an official sample deficiency may file a complaint with a court of competent jurisdiction to vacate or amend the finding of the department.

History: C. 1953, 4-13-6, enacted by L. 1979, ch. 2, § 14; L. 1981, ch. 3, § 1.

4-13-7. Department to publish commercial values applied to components of commercial fertilizer. The department shall annually publish the values per unit of nitrogen, available phosphoric acid, and soluble potash in commercial fertilizers in this state for the purpose of notifying registrants of the commercial value to be applied to commercial fertilizers under section 4-13-6.

History: C. 1953, 4-13-7, enacted by L. 1979, ch. 2, § 14.

4-13-8. Suspension or revocation authorized — Refusal to register authorized — Grounds — Stop sale, use, or removal order authorized — Court action — Procedure. (1) The department may revoke or suspend the registration of any brand of commercial fertilizer or soil amendment, or refuse to register any brand of commercial fertilizer or soil amendment upon satisfactory evidence that the registrant has used fraudulent or deceptive practices in registration or distribution in this state.

(2) The department may issue a "stop sale, use or removal order" to the owner or person in possession of any designated lot of commercial fertilizer or soil amendment which it finds or has reason to believe is being offered or exposed for sale in violation of this chapter. The order shall be in writing and no commercial fertilizer or soil amendment subject to it shall be moved or offered or exposed for sale, except upon the subsequent written release of the department. Before a release is issued, the department may require the owner or person in possession of the "stopped" lot to pay the expense incurred by the department in connection with the withdrawal of the product from the market.

(3) The department is authorized in a court of competent jurisdiction to seek an order of seizure or condemnation of any fertilizer which violates this chapter or, upon proper grounds, to obtain a temporary restraining order or permanent injunction, to prevent violation of this chapter. No bond shall be required of the department in any injunctive proceeding under this section.

(4) If condemnation is ordered, the fertilizer or soil amendment shall be disposed of as the court directs; provided, that in no event shall it order condemnation without giving the claimant of the fertilizer or soil amendment an opportunity to apply to the court for permission to relabel, reprocess, or otherwise bring the product into conformance, or to remove it from the state.

(5) If the court orders condemnation of the commercial fertilizer or soil amendment, court costs, fees, storage, and other expenses shall be awarded against the claimant of the fertilizer or soil amendment.

History: C. 1953, 4-13-8, enacted by L.
1979, ch. 2, § 14.

4-13-9. Sales or exchanges of commercial fertilizers or soil amendments between manufacturers, importers, or manipulators permitted. Nothing in this chapter shall be construed to restrict or avoid sales or exchanges of commercial fertilizers or soil amendments to each other by importers, manufacturers, or manipulators who mix fertilizer or soil amendment materials for sale or as preventing the free and unrestricted shipment of commercial fertilizer or soil amendments to manufacturers or manipulators who have registered their brands as required by this chapter.

History: C. 1953, 4-13-9, enacted by L.
1979, ch. 2, § 14.

4-13-10. Penalty. Any person who violates this chapter is guilty of a class "B" misdemeanor.

History: C. 1953, 4-13-10, enacted by L.
1979, ch. 2, § 14.

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A70-04-3: Regulations Pertaining to the Utah Fertilizer Act. Regulations governing fertilizers and soil amendments promulgated under authority of Title 4, Chapter 2, Section 2, Utah Code Annotated 1953 as amended.

1 Registration of Products.

a. All fertilizer or soil amendment products distributed in Utah shall be officially registered annually with the Utah Department of Agriculture.

(1) Application for registration shall be made to the Department upon forms prescribed and provided by the Department and shall include the following information for each product:

- (a) The net weight
- (b) The brand and grade
- (c) The guaranteed analysis
- (d) The name and address of the registrant

(2) The Commissioner may require submission of the complete formula of any fertilizer or soil amendment if it shall be deemed necessary for administration of the Utah Fertilizer Act. If it appears to the Commissioner that the composition of the product is such as to warrant the proposed claims for it, and if the product and its labeling and any other information which may be required to be submitted comply with the requirements of the act, the products shall be registered.

(a) Before registering any soil amendment the Commissioner shall require evidence to substantiate the claims made for the soil amendment and proof of the value and usefulness of the soil amendment. Such supportive data shall accompany the application for registration and shall be obtained from one or more State Experiment Stations. Cost for such research shall be the responsibility of the applicant. Final decision concerning registration of a soil amendment shall be made by the Commissioner following evaluation of all evidence presented.

(3) The registrant is responsible for the accuracy and completeness of all information submitted concerning application for registration of a fertilizer or soil amendment product.

(4) Once a fertilizer or soil amendment is registered under the act, no further registration is required, as long as the label does not differ in any respect.

(5) Whenever the name of a fertilizer or soil amendment product is changed or there are changes in the product ingredients or guaranteed analysis, a new registration shall be required. Other labeling or guaranteed analysis, a new registration shall be required. Other labeling changes shall not require reregistration, but the registrant shall submit copies of all changes to the Department as soon as they are effective. A reasonable time may be permitted to dispose of properly labeled stocks of the old product.

(6) A registration fee of \$25.00 per product shall be paid by the applicant annually.

(7) Each registration is renewable for a period of one year upon payment of the annual renewal fee of \$25.00 per product which shall be paid on or before December 31 of each year. If the renewal of a fertilizer or soil amendment registration is not filed prior to January 1 of any one year, an additional fee of \$5.00 per product shall be assessed and added to the original registration fee and shall be paid by the applicant before the registration renewal for that fertilizer or soil amendment shall be issued.

(8) A distributor is not required to register each grade of commercial fertilizer or soil amendment formulated by a consumer before mixing, but is required to register the name under which the business of blending or mixing is conducted and to pay an annual blender's license fee of \$50.00. A blender's license shall expire at midnight on December 31 of the year in which it is issued. A blender's license is renewable for a period of one year upon the payment of an annual license renewal fee of \$50.00. Each renewal for a fertilizer or soil amendment blender's license is not filed prior to January 1 of any one year, an additional fee of \$5.00 shall be assessed and added to the original license fee and shall be paid by the applicant before the license shall be issued.

2. Product Labeling.

a. Each container of packaged fertilizer distributed in Utah shall bear a label showing the following information:

- (1) Net weight
- (2) Brand and grade
- (3) Guaranteed analysis
- (4) Name and address of the registrant
- (5) Lot number

b. Each container of packaged soil amendment distributed in Utah shall bear a label showing the following:

- (1) Net weight
- (2) Brand name
- (3) Name and percentages of the soil amending ingredients
- (4) Purpose of product
- (5) Directions for application of product
- (6) Name and address of the registrant
- (7) Lot number

c. When any reference is made upon the label, labeling, or graphic material of a commercial fertilizer or soil amendment to "trace elements," "minor elements," "secondary elements," "plant foods," or similar generalized terms, each individual plant food to which such term refers must be listed upon the label.

d. No guarantee for a plant food element may be shown upon a label which is not listed upon the application for registration of the fertilizer or soil amendment material.

e. If guarantees for secondary plant foods and trace elements are listed upon the label of a fertilizer or soil amendment, they must be represented in terms of the element, and the minimum amount of each which may be guaranteed in the labeling of any fertilizer or soil amendment product is as follows:

Calcium (Ca)	1.00%	Copper (Cu)	0.05%
Magnesium (Mg)	0.50%	Iron (Fe)	0.10%
Sulfur (S)	1.00%	Manganese (Mn)	0.05%
Boron (B)	0.02%	Molybdenum (Mo)	0.0005%
Cobalt (Co)	0.0005%	Sodium (Na)	0.10%
Chlorine (Cl)	0.10%	Zinc (Zn)	0.05%

f. No specialty fertilizer label shall bear a statement that connotes or infers the presence of a slowly available plant nutrient unless the nutrient or nutrients are identified. When a fertilizer label infers or connotes that the nitrogen is slowly available through use of "organic," "organic nitrogen," "ureaform," "long lasting," or similar terms, the guaranteed analysis must indicate the percentage of water insoluble nitrogen in the material. When the water insoluble nitrogen is less than 15% of the total nitrogen, the label shall bear no reference to "long lasting," "organic," or similar terms.

g. Pesticides may be added to registered fertilizers or soil amendments provided:

- (1) The fertilizers and soil amendments and the pesticides are officially registered.
- (2) Each container or package containing a fertilizer or soil amendment pesticide mixture shall have attached a label showing the information stated in paragraph 2(a) of these regulations and in Section 4-14-4 of the Utah Pesticide Control Act.

3. Deficiencies of Ingredients.

a. A commercial fertilizer shall be deemed deficient if the analysis of nutrients is below the guarantee by an amount exceeding the values in the following schedule or if the overall index value of the fertilizer is below 98%.

ALLOWABLE DEFICIENCIES			
Guarantee Percent	Nitrogen Percent	Available Phosphoric Acid	Potash Percent
04 or less	0.49	0.67	0.41
05	0.51	0.67	0.43
06	0.52	0.67	0.47
07	0.54	0.68	0.53
08	0.55	0.68	0.60
09	0.57	0.68	0.65
10	0.58	0.69	0.70
12	0.61	0.69	0.79
14	0.63	0.70	0.87
16	0.67	0.70	0.94
18	0.70	0.71	1.01
20	0.73	0.72	1.08
22	0.75	0.72	1.15
24	0.78	0.73	1.21
26	0.81	0.73	1.27
28	0.83	0.74	1.33
30	0.86	0.75	1.39
32 or more	0.88	0.76	1.44

4. Values of Ingredients.

a. The Department shall annually publish the monetary values per unit of nitrogen, available phosphoric acid, and soluble potash in commercial fertilizer in this state, which may be used as a basis for assessing monetary penalties for ingredient deficiencies as provided under section 4-13-6 of the Utah Fertilizer Act.

5. Unlawful Acts.

a. Any person who has committed any acts included but not limited to those listed below is in violation of the Utah Fertilizer Act or regulations promulgated thereunder and is subject to penalties provided for in Section 4-13-10 of that Act:

- (1) Made false or fraudulent claims through any media misrepresenting the effect of fertilizers or soil amendments offered for sale in Utah;
- (2) Neglected or, after notice, refused to comply with the provisions of the act, these regulations, or any lawful order of the Commissioner;

- (3) Made false or fraudulent records, invoices, or reports;
- (4) Used fraud or misrepresentations in making application for, or renewal of a registration or license;
- (5) Distributed commercial fertilizer or soil amendments which contain seeds or other viable plant parts of noxious weeds.

Reference date effective 1 September 1979
ARM File No. 3553

CHAPTER 14

UTAH PESTICIDE CONTROL ACT

4-14-1. Short title.

This chapter shall be known and may be cited as the "Utah Pesticide Control Act."

4-14-2. Definitions. As used in this chapter:

- (1) "Active ingredient" means any ingredient which prevents, destroys, repels, controls, or mitigates pests, or which acts as a plant regulator, defoliant, or desiccant.
- (2) "Adulterated pesticide" means any pesticide the strength or purity of which is below the standard of quality expressed on the label under which it is offered for sale.
- (3) "Animal" means all vertebrate or invertebrate species.
- (4) "Beneficial insect" means any insect which is an effective pollinator of plants, or which is a parasite or predator of pests, or is otherwise beneficial.
- (5) "Defoliant" means any substance or mixture intended to cause leaves or foliage to drop from a plant, with or without causing abscission.
- (6) "Desiccant" means any substance or mixture intended to artificially accelerate the drying of plant or animal tissue.
- (7) "Distribute" means to offer for sale, sell, barter, ship, deliver for shipment, or receive and (having so received) deliver or offer to deliver pesticides in this state.
- (8) "Environment" means all living plants and animals, water, air, land, and the interrelationships which exist between them.
- (9) "Equipment" means any type of ground, water, or aerial equipment or contrivance using motorized, mechanical, or pressurized power to apply a pesticide, but it does not mean any pressurized hand-sized household apparatus used to apply a pesticide; nor any equipment or contrivance used to apply a pesticide which is dependent solely upon energy expelled by the person making the pesticide application.
- (10) "EPA" means the United States Environmental Protection Agency.
- (11) "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act.
- (12) "Fungus" means any non-chlorophyll-bearing thallophyte (that is, any non-chlorophyll-bearing plant of an order lower than mosses and liverworts), for example, rust, smut, mildew, mold, yeast and bacteria, except those on or in living man or other animals, and except those on or in processed food, beverages, or pharmaceuticals.
- (13) "Insect" means any invertebrate animal generally having a more or less obviously segmented body, for the most part belonging to the Class Insects, comprising six-legged, usually winged forms; for example, bees, bugs, bees, flies and allied classes of arthropods that are wingless usually having more than six legs, as for example spiders, mites, ticks, centipedes, and wood lice.
- (14) "Label" means any written, printed, or graphic matter on, or attached to, a pesticide or a container or wrapper of a pesticide.
- (15) "Labeling" means all labels and all other written, printed, or

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graphic matter:

- (a) Accompanying a pesticide or equipment; or
 - (b) To which reference is made on the label or in literature accompanying a pesticide or equipment, except to current official publication of the EPA, the United States Departments of Agriculture or Interior, the Department of Health, Education, and Welfare, state experimental stations, state agricultural colleges and other federal or state institutions or agencies authorized by law to conduct research in the field of pesticides.
- (16) "Land" means all land, water, air, and all plants, animals, structures, buildings, contrivances, and machinery appurtenant or situated thereon, whether fixed or mobile, including any used for transportation.
- (17) "Misbranded" means any label or labeling which is false or misleading or which does not strictly comport with the label and labeling requirements set forth in section 4 of this chapter.
- (18) "Misuse" means use of any pesticide in a manner inconsistent with its label or labeling.
- (19) "Nematode" means invertebrate animals of the Phylum Nematelminthes and Class Nematoda, that is, unsegmented round worms with elongated, fusiform, or saclike bodies covered with cuticle, also known as nemas or eelworms.
- (20) "Pest" means:
- (a) Any insect, rodent, nematode, fungus, weed; or
 - (b) Any other form of terrestrial or aquatic plant or animal life or virus, bacteria or other microorganism which is injurious to health or to the environment or which the commissioner declares to be a pest; except, viruses, bacteria, or other microorganisms on or in living man or other living animals, or protected wildlife species identified in section 23-13-2 (27) which are regulated by the division of wildlife resources in accordance with section 23-41-1.
- (21) "Pesticide" means any:
- (a) Substance or mixture of substances including a living organism which is intended to prevent, destroy, control, repel, attract, or mitigate any insect, rodent, nematode, snail, fungus, weed, or other form of plant or animal life that is normally considered to be a pest or that the commissioner declares to be a pest;
 - (b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant;
 - (c) Any spray adjuvant, such as a wetting agent, spreading agent, deposit builder, adhesive or emulsifying agent with deflocculating properties of its own used with pesticide to aid its application or effect; and
 - (d) Any other substance designated by the commissioner by regulation.
- (22) "Pesticide dealer" means any person who distributes restricted use pesticide.
- (23) "Plant regulator" means any substance or mixture intended, through physiological action, to accelerate or retard the rate of growth or rate of maturation, or otherwise alter the behavior of ornamental or crop plants, but it does not mean plant nutrients, trace elements, nutritional chemicals, plant inoculants, or soil amendments.
- (24) "Restricted use pesticide" means any pesticide, including a highly toxic pesticide which is a serious hazard to beneficial insects, animals, or land; or any pesticide or pesticide use restricted by the administrator of EPA or by the commissioner.
- (25) "Weed" means any plant which grows where not wanted.
- (26) "Wildlife" means all living things that are neither human,

domesticated, nor pests.

4-14-3. Registration required for distribution - Application - Fees - Renewal - Local needs registration - Distributor or applicator license - Fees - Renewal.

(1) No person may distribute a pesticide in this state which is not registered with the department. Application for registration shall be made to the department upon forms prescribed and furnished by it accompanied with an annual registration fee *determined by the department pursuant to Subsection 4-2-2(2)* for each pesticide registered. Upon receipt by the department of a proper application and payment of the appropriate fee, the commissioner shall issue a registration to the applicant allowing distribution of the registered pesticide in this state through June 30 of each year, subject to suspension or revocation for cause. Each registration is renewable for a period of one year upon the payment of an annual registration renewal fee in an amount equal to the current applicable original registration fee. Each renewal fee shall be paid on or before June 30 of each year.

(2) The application shall include the following information:

(a) The name and address of the applicant and the name and address of the person whose name will appear on the label, if other than the applicant's name;

(b) The name of the pesticide;

(c) A complete copy of the label which will appear on the pesticide; and

(d) Any information prescribed by regulation of the department deemed necessary for the safe and effective use of the pesticide.

(3) Forms for the renewal of registration shall be mailed to registrants at least 30 days before their registration expires. a registration in effect on June 30 for which a renewal application has been filed and the registration fee tendered shall continue in effect until the applicant is notified either that the registration is renewed or that it is suspended or revoked pursuant to section 4-14-8.

(4) The department may, before approval of any registration, require the applicant to submit the complete formula of any pesticide including active and inert ingredients and may also, for any pesticide not registered pursuant to section (3) of FIFRA or for any pesticide on which restrictions are being considered, require a complete description of all tests and test results that support the claims made by the applicant or the manufacturer of the pesticide.

(5) A registrant who desires to register a pesticide to meet special local needs pursuant to section 24(c) of FIFRA shall, in addition to complying with subsection (1) and (2) of this section, satisfy the department that:

(a) A special local need exists;

(b) The pesticide warrants the claims made for it;

(c) The pesticide, if used in accordance with commonly accepted practices, will not cause unreasonable adverse effect on the environment; and

(d) The proposed classification for use conforms with section 3 (d) of FIFRA.

(6) No registration is required for a pesticide distributed in this state pursuant to an experimental use permit issued by the EPA or under section 4-14-5.

(7) No pesticide dealer shall distribute a restricted use pesticide in this state without a license. *No person may apply a pesticide for hire in this state without a license.* A license to engage in either activity may be obtained upon application from the department upon the payment of a license fee *determined by the Department pursuant to Subsection 4-2-2(2).*

which shall entitle to applicant to engage in the otherwise proscribed activity through December 31 of the year in which the license is issued. Such a license is *annually renewable upon payment of an annual license fee determined by the department pursuant to Subsection 4-2-2(2)*.

4-14-4. Labeling requirements for pesticide specified.

(1) Each container of pesticide distributed in this state shall bear a label setting forth:

- (a) The name, brand, or trademark under which it is distributed;
- (b) An accurate statement of the ingredients on that part of the immediate container (and on the outside container and wrapper of the retail package, if there be one, through which the ingredient statement on the immediate container cannot be clearly read) which is presented or displayed under customary conditions of purchase; provided, that the ingredient statement may appear prominently on another part of the container as permitted pursuant to section 2(q)(2)(A) of FIFRA if the size or form of the container makes it impracticable to place it on the part of the retail package which is presented or displayed under customary conditions of purchase;
- (c) A warning or caution statement if necessary, which, if complied with together with any requirements imposed under section 3(d) of FIFRA, is adequate to protect the health and environment;
- (d) The net weight or measure of the content;
- (e) The name and address of the manufacturer, registrant, or person for whom manufactured;
- (f) The EPA registration number assigned to each establishment in which it was produced and the EPA registration number assigned to the pesticide, if required by regulations under FIFRA;
- (g) The federal use classification under which the pesticide is registered or designated for "experimental use only", and
- (h) Directions for use of the pesticide, sufficient to effectuate the purposes for which the product is intended and which, if complied with together with any requirements imposed under section 3(d) of FIFRA, are adequate to protect health and the environment

(2) If the pesticide is highly toxic the label shall, in addition to the other label requirements, display:

- (a) The skull and cross bones;
- (b) The word "POISON" in red prominently displayed on a background of distinctly contrasting color; and
- (c) A statement of a practical treatment (first aid or otherwise) in case of poisoning by the pesticide.

4-14-5. Issuance of experimental use permits - Application - Terms and conditions for issuance.

- (1) The department upon application may:
 - (a) Issue an experimental use permit to any person if it determines that the applicant needs such a permit in order to accumulate information necessary to register a pesticide under section 4-14-3; or

(b) Refuse to issue an experimental permit if it determines that issuance is not warranted or that the pesticide use to be made under the proposed terms and conditions may cause unreasonable adverse effects on the environment.

(2) The department may also with respect to issuance of an experimental use permit

(a) Prescribe the terms and conditions for the conduct of the experimental use which in all events shall be under the supervision of the department; and

(b) Revoke or modify any experimental use permit if it determines that the terms or conditions of the experimental use are being violated, or that the terms and conditions prescribed are inadequate to avoid unreasonable adverse effects to the environment.

(3) Application for an experimental use permit may be made before, after, or simultaneously with an application for registration.

4-14-6. Department authorized to make and enforce regulation. The department is authorized, subject to the Utah Rule-Making Act, to:

(1) Declare as a pest any form of plant or animal life (other than man and other than bacteria, viruses, and other microorganisms on or in living man or other living animals) which is injurious to health or the environment;

(2) Determine in accordance with the regulations promulgated by the EPA under section 25(c) (2) of FIFRA whether pesticides registered for special local needs under the authority of section 24(c) of FIFRA are highly toxic to man;

(3) Determine consistent with EPA regulations, that certain pesticides or quantities of substances contained in these pesticides, are injurious to the environment;

(4) Adopt a list of "restricted use pesticides" for the state or designated areas within the state if it determines upon substantial evidence presented at a public hearing and upon recommendation of the pesticide committee that restricted use is necessary to prevent damage to property or to the environment; or

(5) Adopt any regulation, not inconsistent with federal regulations promulgated under FIFRA, deemed necessary to administer and enforce this chapter, including but not limited to, regulations relating to the sale, distribution, use, and disposition of pesticides as deemed necessary to prevent damage and to protect the public health.

4-14-7. Enforcement - Inspection and sampling authorized - Notice of deficiency to be given registrant - Objects of inspection delineated.

(1) The department to determine compliance with this chapter, shall periodically sample, inspect, and analyze pesticides distributed within this state; observe and investigate the use and application of pesticides within this state; and inspect equipment used to apply pesticides in this state to determine if they comply with this chapter.

(2) If a pesticide sample, upon analysis, fails to comply with this chapter, the department shall give written notice to that effect to the registrant or owner of the pesticide. Nothing in this chapter however, shall be construed as requiring the department to refer minor violations for criminal prosecution or for the institution of condemnation proceedings if it believes the public interest will best be served through informal action.

(3) The department, for the purpose of enforcing this section, is authorized at reasonable times, to enter any private or public premises for the purpose of:

- (a) Inspecting any equipment used in applying pesticides;
 - (b) Inspecting or sampling lands actually or reported to be exposed to pesticides;
 - (c) Inspecting storage or disposal areas;
 - (d) Investigating complaints of injury to animals or lands;
 - (e) Sampling pesticides wherever located including in vehicles; or
 - (f) Observing the use and application of a pesticide.
- (4) The department may proceed immediately, if admittance is refused, to obtain an ex parte warrant from the nearest court of competent jurisdiction to allow entry upon the premises for any purpose specified in subsection (3) of this section.

4-14-8. Suspension or revocation - Grounds - Stop sale, use, or removal order authorized - Court action - Procedure - Award of costs authorized.

(1) The department may revoke or suspend the registration of any pesticide upon satisfactory evidence that the registrant has used fraudulent or deceptive practices in the registration of the pesticide or in its distribution in this state.

(2) The department may issue a "stop sale, use or removal order" to the owner or distributor of any designated pesticide or lot of pesticide which it finds or has reason to believe is being offered or exposed for sale in violation of this chapter. The order shall be in writing and no pesticide subject to it shall be moved, offered, or exposed for sale, except upon the subsequent written release by the department. Before a release is issued, the department may require the owner or distributor of the "stopped" pesticide or lot to pay the expense incurred by the department in connection with the withdrawal of the product from the market.

(3) The department is authorized in a court of competent jurisdiction to seek an order of seizure or condemnation of a pesticide which violates this chapter or, upon proper grounds, to obtain a temporary restraining order or permanent injunction to prevent the violation of this chapter. No bond shall be required of the department in an injunctive proceeding brought under this section.

(4) If condemnation is ordered, the pesticide or equipment shall be disposed of as the court directs; provided, that in no event shall it order condemnation without giving the registrant or other person an opportunity to apply to the court for permission to relabel, reprocess, or otherwise bring the pesticide into conformance, or for permission to remove it from the state.

(5) If the court orders condemnation, court costs, fees, storage, and other costs shall be awarded against the claimant of the pesticide or equipment.

4-14-9. Examination requirements for license to act as applicator may be waived through reciprocal agreement.

The department may waive any or all examination requirements which may be specified by regulation for noncommercial, commercial, and private applicators through a reciprocal agreement with another state whose examination requirements and standards for licensure are substantially similar to those of Utah.

4-14-10. Pesticide committee created - Composition - Terms - Compensation - Duties.

(1) There is hereby created a "pesticide committee" composed of eight persons appointed by the governor to four year terms of office with the advice and consent of the senate from among the following state agencies and organizations:

- (a) One member from the Utah state agricultural extension service;
- (b) One member from the department of agriculture;
- (c) One member from the state department of health;
- (d) One member from the state division of wildlife resources;
- (e) One member from the Utah Pest Control Association;
- (f) One member from the agricultural chemical industry;
- (g) One member from the Utah Farmers Union; and
- (h) One member from the Utah Farm Bureau Federation.

(2) The committee shall elect one of its number to serve as chairman who is responsible for the call and conduct of meetings of the pesticide committee.

(3) Attendance of a simple majority of the members shall constitute a quorum for the transaction of official business. Members, exclusive of those who are employees of the state, are entitled to per diem and expenses in accordance with section 63-2-15.

(4) The pesticide committee shall make recommendations to the Commissioner regarding the promulgation of regulations pertaining to the sale, distribution, use, and disposal of pesticides.

R68-07 Rule Pertaining to the Utah Pesticide Control Act.

R68-07-01 Authority

Promulgated under authority of Title 4, Chapter 14, Section 6.

R68-07-02 Registration of Products.

A. All pesticide products distributed in Utah shall be officially registered annually with the Utah Department of Agriculture.

1. Application for registration shall be made to the Department upon forms prescribed and provided by it and shall include the following information:

a. The name and address of the applicant and the name and address of the person whose name will appear on the label, if other than the applicant.

b. The name of the pesticide.

c. A complete copy of the label which will appear on the pesticide.

2. The Department may require submission of the complete formula of any pesticide if it shall be deemed necessary for administration of the Utah Pesticide Control Act. If it appears to the Department that the composition of the product is such as to warrant the proposed claims for it, and if the product and its labeling and any other information which may be required to be submitted comply with the requirements of the act, the product shall be registered.

3. The registrant is responsible for the accuracy and completeness of all information submitted concerning application for registration of a pesticide.

4. Once a pesticide is registered under the Act, no further registration is required: Provided that,

a. the product remains in the manufacturer's or registrant's original container; and

b. the claims made for it, the directions for its use, and other labeling information do not differ in substance from the representations made in connection with registration.

5. Whenever the name of a pesticide product is changed or there are changes in the product ingredients, a new registration shall be required. Other labeling changes shall not require reregistration, but the registrant shall submit copies of all changes to the Department as soon as they are effective. A reasonable time may be permitted to dispose of properly labeled stocks of the old product.

6. A registrant who desires to register a pesticide to meet special local needs pursuant to Section 24 (c) of FIFRA shall comply with Section 4-14-3 of the Utah Pesticide Control Act.

7. No registration is required for a pesticide distributed in Utah pursuant to an experimental use permit issued by EPA or under Section 4-14-5 of the Utah Pesticide Control Act.

8. A registration fee of \$15.00 per product shall be paid annually, regardless of the number of products registered per applicant.

9. Each registration is renewable for a period of one year upon payment of the annual renewal fee of \$15.00 which shall be paid on or before June 30 of each year. If the renewal of a pesticide registration is not filed prior to July 1 of any one year, an additional fee of \$5.00 shall be assessed and added to the original registration fee and shall be paid by the applicant before the registration renewal for that pesticide shall be issued.

R68-07-03 Product Labeling.

A. Each container of pesticide distributed in Utah shall bear a label showing the information set forth in Section 4-14-4 of the Utah Pesticide Control Act.

B. All pesticide labels shall contain statements, words, graphic material, and any other information required by the U.S. Environmental Protection Agency.

R68-07-04 Classification of Pesticides.

The Commissioner shall classify all pesticide products registered in Utah for "restricted use" or "general use" according to standards consistent with Section 3 of FIFRA. The Commissioner shall consider as a minimum all pesticides and uses classified as restricted by EPA to be restricted in the State of Utah. He may restrict the use of additional pesticides if he finds that the characteristics of such pesticides require that their uses be restricted to prevent damage to property other than the property to which they are directly applied or to persons, animals, crops or vegetation other than the pests which they are intended to destroy. Individuals not appropriately certified are prohibited from using restricted use pesticides, with the exception of those exempted in Section 6a(b) of these rules and competent individuals working under the direct supervision of a certified private applicator.

R68-07-05 Classification of Pesticide Applicators.

A. Pesticide applicators shall be classified as commercial applicators, non-commercial applicators, or private applicators according to the following criteria:

1. Commercial Applicator - any person who uses any pesticide for hire or compensation.

2. Non-commercial Applicator - any person working as an individual or an employee of a firm or government agency who uses or demonstrates the use of any pesticide classified for restricted use and who does not qualify as a private applicator, nor require a commercial applicator's license.

3. Private Applicator - any person who uses or supervises the use of any pesticide which is classified for restricted use for purposes of producing any agricultural commodity on property owned or rented by him or his employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person.

R68-07-06 Categorization of Commercial and Non-Commercial Applicators.

A. Commercial and non-commercial applicators shall be categorized in one or more of the categories defined below, based on the application site and the type of work they perform.

1. Categories.

a. Agricultural Pest Control.

(1) Plant. This category includes commercial and non-commercial applicators using pesticides to control pests in the production of agricultural crops including, but not limited to, field crops, vegetables, small fruits, tree fruits, grasslands, and non-crop agricultural lands.

(2) Animal. This category includes commercial and non-commercial

applicators using pesticides on animals including but not limited to, beef cattle, dairy cattle, swine, sheep, horse, goats, poultry, and livestock, and to places on or in which animals are confined. Doctors of veterinary medicine engaged in business of applying pesticides for hire, publicly representing themselves as pesticide applicators, or engaged in large scale use of pesticides are included in this category.

b. Forest Pest Control. This category includes commercial and non-commercial applicators using pesticides in forests, forest nurseries, and forest seed producing areas.

c. Ornamental and Turf Pest Control. This category includes commercial and non-commercial applicators using pesticides to control pests in the maintenance and production of ornamental trees, shrubs, flowers and turf.

d. Seed Treatment. This category includes commercial and non-commercial applicators using pesticides on seeds.

e. Aquatic Pest Control. This category includes commercial and non-commercial applicators using pesticides purposefully applied to standing or running water, excluding applicators engaged in public health-related activities included in Section 5a(h).

f. Right-of-Way Pest Control. This category includes commercial and non-commercial applicators using pesticides in the maintenance of public roads, electric power lines, pipelines, railway rights-of-way, or other similar areas.

g. Industrial, Institutional, Structural and Health-related Pest Control. This category includes commercial and non-commercial applicators using pesticides in, on, or around food handling establishments; human dwellings; institutions, such as schools and hospitals; industrial establishments, including warehouses and grain elevators; and any other structures and adjacent areas, public or private; and for the protection of stored, processed or manufactured products.

h. Public Health Pest Control. This category includes state, federal, or other governmental employees using pesticides in public health programs for the management and control of pests having medical and public health importance.

i. Regulatory Pest Control. This category includes state, federal, or other governmental employees who use pesticides in the control of regulated pests.

j. Demonstration and Research Pest Control. This category includes:

(1) Individuals who demonstrate to the public the proper use and techniques of application of pesticides or supervise such demonstration. Included in this group are such persons as extension specialists and county agents, commercial representatives demonstrating such persons as extension specialists and county agents, commercial representatives demonstrating pesticide products, and those individuals demonstrating methods used in public programs.

(2) Persons conducting field research with pesticides, and in doing so, use or supervise the use of pesticides. This group includes state, federal, commercial, and other persons conducting field research on or utilizing restricted use pesticides.

k. Aerial Application Pest Control. This category includes commercial and non-commercial applicators applying pesticides by aircraft.

R68-07-07 Standards of Competence for Certification of Applicators.

A. Applicators must show competence in the use and handling of pesticides according to the hazards involved in their particular classification.

Standards for certification for applicators as classified in Section 4 of these rules have been established by the U.S. Environmental Protection Agency and such standards shall be minimal for certification of applicators in the State of Utah.

1. Commercial and Non-Commercial Applicators.

Commercial and non-commercial applicators shall demonstrate practical knowledge by written examination(s) of the principles and practices of pest control and safe use of pesticides, to include the general standards applicable to all categories and the standards specifically identified for each category or subcategory designated by the applicant, as set forth in the federal regulations (40 CFR, Section 171.4) and these rules. In addition, applicators applying pesticides by aircraft shall be examined on the additional standards specifically identified for this method of application as set forth herein.

a. Aerial Application. Additional Standards.

Applicators shall demonstrate by examination practical knowledge of pest control in a wide variety of environments. These may include, but are not limited to, agricultural properties, rangelands, forestlands, and marshlands. Applicators must have the knowledge of the significance of drift and of the potential for non-target injury and the environmental contamination. Applicators shall demonstrate competency as required by the general standards for all categories of certified commercial and non-commercial applicators. They shall comply with all standards set forth by the Federal Aviation Administration (FAA) and submit proof of current registration by that agency as a requirement for licensing as an aerial applicator.

b. Exemptions. The standards for commercial and non-commercial applicators do not apply to the following persons for purposes of these rules:

(1) Persons conducting laboratory-type research involving pesticides; and

(2) Doctors of medicine and doctors of veterinary medicine applying pesticides or drugs or medication during the course of their normal practice and who do not publicly represent themselves as pesticide applicators.

2. Private Applicators. Private applicators shall show practical knowledge of the principles and practices of pest control and the safe use of pesticides, to include the standards for certification of private applicators as set forth in federal regulations (40 CFR Section 171.5). In addition, private applicators applying restricted use pesticides by aircraft shall show practical knowledge of the additional standards specifically identified for that method of application in Section 6a(1)(b) of these rules.

3. Supervision of Non-Certified Applicators by Certified Private Applicators.

a. A certified private applicator who functions in a supervisory role shall be responsible for the actions of any non-certified applicators under his instruction and control.

b. A certified private applicator shall provide verifiable instruction for the application of a restricted use pesticide applied by a non-certified applicator under his control when the certified applicator is not required to be physically present. The instructions may be either oral or written, and shall include instructions for contacting the certified applicator in the event he is needed.

c. The certified applicator shall be physically present to supervise the application of a restricted use pesticide by a non-certified applicator if such presence is required by the label of the pesticide being applied.

R68-07-08 Certification Procedures.

A. Commercial Applicators.

1. License Required. No person shall apply any pesticide for hire or compensation to the lands of another at any time without a commercial applicator's license issued by the Commissioner. Application for a license shall be made in writing to the Commissioner on a designated form obtained from the Commissioner. Each individual performing the physical act of applying pesticides for hire or compensation must be licensed.

2. Written Examination. The Commissioner shall not issue a commercial applicator's license until the applicant is qualified by passing the appropriate written examinations to demonstrate to the Commissioner his knowledge of how to apply pesticides under the classifications applied for, and his knowledge of the nature and effect of pesticides he may apply under such classifications. All applicants for a commercial applicator license must successfully pass a general examination based upon standards applicable to all categories. After passing the general examination, applicants must pass the examination(s) pertaining to the category(s) for which they desire to be licensed. Certification examinations shall be conducted by representatives of the Commissioner upon appointment. A score of 70 or above is required for passing any written examination. A score of less than 70 on the general standards examination shall result in denial of certification. Failure of category examination shall result in denial of certification for that category. Re-examination after failure to pass an examination may be scheduled not less than fifteen days from the date of the last examination unless the examining officer waives such waiting period for just cause.

3. License Issuance. If the Commissioner finds the applicant qualified to apply pesticides in the classifications he has applied for and he has paid the prescribed license fee, the Commissioner shall issue a commercial applicator's license limited to the classifications for which he is qualified, which license shall expire December 31 of each year unless it has been revoked or suspended prior thereto by the Commissioner for cause. Each applicant for a commercial applicator's license shall pay an annual license fee of \$10.00 before the license shall be issued. The applicant will be required to pay only one annual license fee, regardless of the number of categories for which he is certified.

4. License Renewal. The Commissioner may renew any applicant's license under the classification(s) for which such applicant is licensed, subject to re-examination at any time for additional knowledge that may be required to insure a continuing level of competence and ability to use pesticides safely and properly due to changing technology. Each license shall expire on December 31 of the year of its issuance. Upon payment of the annual license fee, the license may be renewed until such time that a re-examination is required. If the renewal of a commercial pesticide applicator's license is not filed prior to January 1 of any year, an additional fee of \$5.00 shall be assessed and added to the original license fee and shall be paid by the applicant before the license renewal shall be issued. All certified commercial applicator shall be required to be recertified at least every three years by satisfying the appropriate certification procedures previously described, or any other requirements specified by the Commissioner.

5. Records Maintained. Commercial applicators shall keep and maintain records of each application of any pesticide to include the following information:

- a. Name and address of owner of property treated.
- b. Location of treatment site, if different from (a).
- c. Date of application.
- d. Name of pesticide, formulation, concentration, rate applied, and total amount used.

6. Purpose of Application. Such records shall be kept for a period of two years from the date of application of the pesticide and shall be available for inspection by the Commissioner at reasonable times. The Commissioner shall, upon request in writing, be furnished a copy of such records by the commercial applicator.

7. Exemption.

The provisions of this section relating to license and requirements for their issuance do not apply to a person applying pesticides for his neighbors provided he operates and maintains pesticide application equipment for his own use, is not engaged in the business of applying pesticides for hire or compensation, does not publicly represent himself as a pesticide applicator, and operates his pesticide application equipment only in the vicinity of his owned or rented property for the accommodation of his neighbors; provided, however, when such persons use a restricted use pesticide, they shall comply with the certification requirements specified herein.

B. Non-Commercial Applicators.

1. License Required. No non-commercial applicator shall use or demonstrate the use of a restricted use pesticide unless he has passed the examination(s) required for commercial applicators as described in Section 7a(2) of these rules and has been issued a license by the Commissioner. Application for such license shall be made in writing on a form obtained from the Commissioner and shall include such information as is prescribed by the Commissioner.

2. License Issuance. If the Commissioner finds the applicant qualified to apply restricted use pesticides in the classification(s) applied for, the Commissioner shall issue a non-commercial applicator's license limited to such activities and classifications applied for and no license fee shall be required. The license shall expire December 31 of each year unless it has been suspended or revoked prior thereto by the Commissioner for cause. If the Commissioner does not approve an application for a non-commercial license, he shall inform the applicant of the reasons therefor.

3. License Renewal. The Commissioner may renew the applicant's license under the classification(s) for which such applicant is licensed, subject to re-examination at any time for any additional knowledge that may be required to insure a continuing level of competence and ability to use restricted use pesticides safely and properly due to changing technology. Non-commercial applicators shall be required to be recertified at least every three years by satisfying certification requirements as described herein, or any other requirements specified by the Commissioner.

4. Records Maintained. Non-commercial applicators shall keep and maintain records of each application of restricted use pesticides to include the following information:

- a. Name and address of owner of property treated.
- b. Location of treatment site, if different from (a).
- c. Date of application.
- d. Name of pesticide, formulation, concentration, rate applied and total amount used.

e. Purpose of application. Such records shall be kept for a period of two years from the date of application of the pesticide and shall be available for inspection by the Commissioner at reasonable times. The Commissioner shall, upon request in writing, be furnished a copy of such records by the non-commercial applicator.

5. Exemption. The provisions of this section shall not apply to persons conducting laboratory research involving restricted use pesticides as drugs or medication during the course of their normal practice.

C. Private Applicators.

1. Certification Required. No private applicator shall use or supervise the use of any restricted use pesticide without a private applicator's certificate issued by the Commissioner. Issuance of such certificate shall be conditioned upon the applicator's complying with the certification requirements determined by the Commissioner as necessary to prevent unreasonable adverse effects on the environment, including injury to the applicator or other persons, for the pesticide use. Application for a certificate shall be made in writing on a designated form obtained from the Commissioner.

2. Certification Methods. A private applicator may become certified to purchase or apply restricted use pesticides by complying with one of the following procedures:

a. Training Course - Successful completion of a training course approved by the Utah Department of Agriculture.

b. Self-study Program - Successful completion of an approved self-study workbook.

c. Written Examination - Successful completion of an approved written examination for private applicators.

d. Emergency Use Permit - A single restricted use pesticide may be purchased and used by a previously non-certified person on a one-time only basis if an emergency control situation is shown to exist. Before purchasing the product, the applicant shall participate in a discussion concerning safe use of the specific product with a representative of the Utah Department of Agriculture or the Utah Cooperative Extension Service. Following an adequate discussion of same, the representative may issue the applicant a permit to purchase and use the product on a specific site on a one-time basis. Applicant shall be required to become certified by one of the aforementioned private applicator certification methods before he/she shall be authorized to further purchase and use restricted use pesticides.

e. Certification of Non-English-Reading Applicants. Non-English-reading applicants may be certified to use a specific restricted use product by successfully completing an oral review of safety aspects associated with the use of that product. Such review shall include an understanding of information on the label including the common name of the pesticide to be applied, pest(s) to be controlled, timing, and methods of application, safety precautions, any pre-harvest or re-entry restrictions and any specific disposal procedures. The review shall be conducted by a representative of the Utah Department of Agriculture or the Utah Cooperative Extension Service, and a permit will be issued for purchase and use of that particular pesticide.

3. Certificate Issuance. If the Commissioner finds the applicant competent, he shall issue him a private applicator's certificate without fee. If a certificate is not issued as applied for, the Commissioner shall inform the applicant of the reasons therefor.

4. Certificate Renewal. All certified private applicators shall be required to be recertified within three years of issuance of a certificate, or more frequently if determined necessary by the Commissioner, by satisfying any of the certification procedures previously described, or any other requirements specified by the Commissioner.

D. Employees of Federal Agencies. Federal Government Employees wishing to be certified in Utah shall be required to qualify as non-commercial applicators by passing the appropriate examinations, unless such requirement is waived upon presentation of adequate evidence of certification in the appropriate categories from another state with comparable certification requirements. In the event a federal agency develops an applicator certification plan which meets the Utah certification standards, employees of that agency who become certified under that plan may qualify for certification in the State of Utah.

E. Certification of Out-of State Applicants.

When a pesticide applicator is certified under an approved state plan of another state and desires to apply pesticides in Utah, he shall make application to the Commissioner and shall include, along with the proper fee (if any) and any other details required by the Act or these rules, a true copy of his credentials as proof of certification in another state. The Commissioner may then, if he approves the credentials, issue a Utah certification to the applicator in accordance with the use situations for which the applicator is certified in another state without requiring determination of competency; provided, that the state having certified the applicator will similarly certify holders of Utah licenses or certificates and has entered into a reciprocal agreement with the State of Utah. Out-of-state pesticide applicators who operate in Utah will be subject to all Utah laws and rules.

R68-07-09 Dealer Licensing.

A. In order to facilitate rule of the distribution and sale of restricted use pesticides it is necessary to license dealers who dispense such materials.

1. License Required.

It shall be unlawful for any person to act in the capacity of a restricted use pesticide dealer, or advertise as, or assume to act as such a dealer at any time without first having obtained an annual license from the Commissioner. A license shall be required for each location or outlet located within this state from which such pesticides are distributed; provided, that any manufacturer, registrant, or distributor who has no pesticide dealer outlet licensed within this state and who distributes a restricted use pesticide directly into this state shall obtain a pesticide dealer license for his principal out-of-state location or outlet; provided further, that any manufacturer, registrant, or distributor who sells only through or to a pesticide dealer is not required to obtain a pesticide dealer license.

2. License Issuance. Application for a pesticide dealer's license shall be on a form prescribed by the Commissioner and shall be accompanied by a license fee of \$10.00. License renewal fees are payable annually before January 1. If the renewal of a pesticide dealer's license is not filed prior to January 1, of any one year, an additional fee of \$5.00 shall be assessed and added to the original license fee and shall be paid by the applicant before the license renewal shall be issued.

3. Records Maintained. Each dealer outlet licensed to sell restricted use pesticides shall be required by the Commissioner to maintain a restricted use pesticide sales register. A register form, provided by the Commissioner, shall include the following information:

- a. The name and address of the purchaser.
- b. Name of material purchased.
- c. EPA registration number of material purchased.
- d. Date of purchase.
- e. License or certificate number of the purchaser. Such records shall be kept for a period two years and shall be available for inspection by the Commissioner at reasonable times. The Commissioner, upon request, shall be furnished a copy of such records by the restricted use pesticide dealer.

4. Exemption. Provisions of this section shall not apply to licensed pesticide applicator who sells restricted use pesticides only as an integral part of his pesticide application service when such pesticides are dispensed only through equipment used for such pesticide application; or any federal, state, county, or municipal agency which provides pesticides only for its own programs.

5. Responsible for Acts of Employees. Each pesticide dealer shall be responsible for the acts of each person employed by him in the solicitation and sale of restricted use pesticides and all claims and recommendations for use of restricted use pesticides. A dealer's license shall be subject to denial, suspension, or revocation for any violation of the Pesticide Control Act or rules promulgated thereunder, whether committed by the dealer or by the dealer's officer, agent, or employee.

R68-08-10 Storage and Disposal of Pesticides and Pesticide Containers.

No person shall transport, store, or dispose of any pesticide or pesticide containers in such a manner as to cause injury to humans, vegetation, crops, livestock, wildlife, beneficial insects or to pollute any waterway in a manner harmful to any wildlife therein.

R68-07-11 Unlawful Acts.

A. Any person who has committed any of the following acts is in violation of the Utah Pesticide Control Act or rules promulgated thereunder and is subject to penalties provided for in Section 4-14-11 of that Act:

1. Made false or fraudulent claims through any media misrepresenting the effect of pesticides or methods to be utilized;
2. Made a pesticide application inconsistent with the labeling registered with EPA or the Commissioner for that pesticide, or in violation of EPA or Commissioner restrictions on the use of that pesticide;
3. Applied known ineffective or improper pesticides;
4. Operated in a faulty, careless or negligent manner;
5. Neglected or, after notice, refused to comply with the provisions of the Act, these rules, or of any lawful order of the Commissioner;
6. Refused or neglected to keep and maintain in the records, required by these rules, or to make reports when and as required;
7. Made false or fraudulent records, invoices, or reports;
8. Engaged in business of applying a pesticide for hire or compensation on the lands of another without having a valid commercial applicator's license;
9. Used, or supervised the use of, a pesticide which is restricted to use by "certified applicators" without having qualified as a certified

applicator;

10. Used fraud or misrepresentation in making application for, or renewal of, a registration, license, permit, or certification;

11. Refuse or neglected to comply with any limitations or restrictions on or in a duly issued certificate, license, or permit;

12. Used or caused to be used any pesticide in a manner inconsistent with its labeling or rules of the Commissioner if those rules further restrict the uses provided on the labeling;

13. Aided or abetted a licensed or an unlicensed person to evade the provisions of the Act; conspired with such a licensed or an unlicensed person to evade the provisions of the Act; or allowed one's certificate, license, or permit to be used by another person;

14. Impersonated any federal, state, county, or other government official;

15. Distributed any pesticide labeled for restricted use to any person unless such person or his agent has a valid certificate, license, or permit to use, supervise the use, or distribute restricted use pesticide;

16. Applied pesticides onto any land without the consent of the owner or person in possession thereof; except, for governmental agencies which must abate a public health problem; or

17. Applied pesticides known to be harmful to honeybees on blossoming crops on which bees are working during the period between two hours after sunrise and two hours before sunset; except, on property owned or operated by the applicator.

R68-07-12 Effective Date.

This rule shall become effective January 3, 1989

KEY: Inspections
1979

4-14-6

(b) **STATE PLANS.**—If the Administrator rejects a plan submitted under this paragraph, he shall afford the State submitting the plan due notice and opportunity for hearing before so doing. If the Administrator approves a plan submitted under this paragraph, then such State shall certify applicators of pesticides with respect to such State. Whenever the Administrator determines that a State is not administering the certification program in accordance with the plan approved under this section, he shall so notify the State and provide for a hearing at the request of the State, and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such plan.

(c) **INSTRUCTION IN INTEGRATED PEST MANAGEMENT TECHNIQUES.**—Standards prescribed by the Administrator for the certification of applicators of pesticides under subsection (a), and the State plans submitted to the Administrator under subsections (a) and (b), shall include provisions for making instructional materials concerning integrated pest management techniques available to individuals at their request in accordance with the provisions of section 23(c) of this Act, but such plans may not require that any individual receive instruction concerning such techniques or be shown to be competent with respect to the use of such techniques. The Administrator and States implementing such plans shall provide that all interested individuals are notified of the availability of such instructional materials.

(d) **IN GENERAL.**—No regulations prescribed by the Administrator for carrying out the provisions of this Act shall require any private applicator to maintain any records or file any reports or other documents.

(e) **SEPARATE STANDARDS.**—When establishing or approving standards for licensing or certification, the Administrator shall establish separate standards for commercial and private applicators.

SEC. 12. [136j] UNLAWFUL ACTS.

(a) **IN GENERAL.**—

(1) Except as provided by subsection (b), it shall be unlawful for any person in any State to distribute or sell to any person—

(A) any pesticide that is not registered under section 3 or whose registration has been canceled or suspended, except to the extent that distribution or sale otherwise has been authorized by the Administrator under this Act;

(B) any registered pesticide if any claims made for it as a part of its distribution or sale substantially differ from any claims made for it as a part of the statement required in connection with its registration under section 3;

(C) any registered pesticide the composition of which differs at the time of its distribution or sale from its composition as described in the statement required in connection with its registration under section 3;

(D) any pesticide which has not been colored or discolored pursuant to the provisions of section 25(c)(5);

(E) any pesticide which is adulterated or misbranded; or

(F) any device which is misbranded.

- (2) It shall be unlawful for any person—
- (A) to detach, alter, deface, or destroy, in whole or in part, any labeling required under this Act;
 - (B) to refuse to—
 - (i) prepare, maintain, or submit any records required by or under section 5, 7, 8, 11, or 19;
 - (ii) submit any reports required by or under section 5, 6, 7, 8, 11, or 19; or
 - (iii) allow any entry, inspection, copying of records, or sampling authorized by this Act;
 - (C) to give a guaranty or undertaking provided for in subsection (b) which is false in any particular, except that a person who receives and relies upon a guaranty authorized under subsection (b) may give a guaranty to the same effect, which guaranty shall contain, in addition to his own name and address, the name and address of the person residing in the United States from whom he received the guaranty or undertaking;
 - (D) to use for his own advantage or to reveal, other than to the Administrator, or officials or employees of the Environmental Protection Agency or other Federal executive agencies, or to the courts, or to physicians, pharmacists, and other qualified persons, needing such information for the performance of their duties, in accordance with such directions as the Administrator may prescribe, any information acquired by authority of this Act which is confidential under this Act;
 - (E) who is a registrant, wholesaler, dealer, retailer, or other distributor to advertise a product registered under this Act for restricted use without giving the classification of the product assigned to it under section 3;
 - (F) to distribute or sell, or to make available for use, or to use, any registered pesticide classified for restricted use for some or all purposes other than in accordance with section 3(d) and any regulations thereunder. It shall not be unlawful to sell, under regulations issued by the Administrator, a restricted use pesticide to a person who is not a certified applicator for application by a certified applicator;
 - (G) to use any registered pesticide in a manner inconsistent with its labeling;
 - (H) to use any pesticide which is under an experimental use permit contrary to the provisions of such permit;
 - (I) to violate any order issued under section 13;
 - (J) to violate any suspension order issued under section 3(c)(2)(B), 4, or 6;
 - (K) to violate any cancellation order issued under this Act or to fail to submit a notice in accordance with section 6(g);
 - (L) who is a producer to violate any of the provisions of section 7;
 - (M) to knowingly falsify all or part of any application for registration, application for experimental use permit, any

information submitted to the Administrator pursuant to section 7, any records required to be maintained pursuant to this Act, any report filed under this Act, or any information marked as confidential and submitted to the Administrator under any provision of this Act;

(N) who is a registrant, wholesaler, dealer, retailer, or other distributor to fail to file reports required by this Act;

(O) to add any substance to, or take any substance from, any pesticide in a manner that may defeat the purpose of this Act; or ¹²⁻¹

(P) to use any pesticide in tests on human beings unless such human beings (i) are fully informed of the nature and purposes of the test and of any physical and mental health consequences which are reasonably foreseeable therefrom, and (ii) freely volunteer to participate in the test. ¹²⁻²

(Q) to falsify all or part of any information relating to the testing of any pesticide (or any ingredient, metabolite, or degradation product thereof), including the nature of any protocol, procedure, substance, organism, or equipment used, observation made, or conclusion or opinion formed, submitted to the Administrator, or that the person knows will be furnished to the Administrator or will become a part of any records required to be maintained by this Act;

(R) to submit to the Administrator data known to be false in support of a registration; or

(S) to violate any regulation issued under section 3(a) or 19.

(b) EXEMPTIONS.—The penalties provided for a violation of paragraph (1) of subsection (a) shall not apply to—

(1) any person who establishes a guaranty signed by, and containing the name and address of, the registrant or person residing in the United States from whom he purchased or received in good faith the pesticide in the same unbroken package, to the effect that the pesticide was lawfully registered at the time of sale and delivery to him, and that it complies with the other requirements of this Act, and in such case the guarantor shall be subject to the penalties which would otherwise attach to the person holding the guaranty under the provisions of this Act;

(2) any carrier while lawfully shipping, transporting, or delivering for shipment any pesticide or device, if such carrier upon request of any officer or employee duly designated by the Administrator shall permit such officer or employee to copy all of its records concerning such pesticide or device;

(3) any public official while engaged in the performance of his official duties;

(4) any person using or possessing any pesticide as provided by an experimental use permit in effect with respect to such pesticide and such use or possession; or

¹²⁻¹ So in original. "or" should be struck.

¹²⁻² So in original. Period should be a semicolon.

(5) any person who ships a substance or mixture of substances being put through tests in which the purpose is only to determine its value for pesticide purposes or to determine its toxicity or other properties and from which the user does not expect to receive any benefit in pest control from its use.

SEC. 13. [136k] STOP SALE, USE, REMOVAL, AND SEIZURE.

(a) **STOP SALE, ETC., ORDERS.**—Whenever any pesticide or device is found by the Administrator in any State and there is reason to believe on the basis of inspection or tests that such pesticide or device is in violation of any of the provisions of this Act, or that such pesticide or device has been or is intended to be distributed or sold in violation of any such provisions, or when the registration of the pesticide has been canceled by a final order or has been suspended, the Administrator may issue a written or printed “stop sale, use, or removal” order to any person who owns, controls, or has custody of such pesticide or device, and after receipt of such order no person shall sell, use, or remove the pesticide or device described in the order except in accordance with the provisions of the order.

(b) **SEIZURE.**—Any pesticide or device that is being transported or, having been transported, remains unsold or in original unbroken packages, or that is sold or offered for sale in any State, or that is imported from a foreign country, shall be liable to be proceeded against in any district court in the district where it is found and seized for confiscation by a process in rem for condemnation if—

(1) in the case of a pesticide—

(A) it is adulterated or misbranded;

(B) it is not registered pursuant to the provisions of section 3;

(C) its labeling fails to bear the information required by this Act;

(D) it is not colored or discolored and such coloring or discoloring is required under this Act; or

(E) any of the claims made for it or any of the directions for its use differ in substance from the representations made in connection with its registration;

(2) in the case of a device, it is misbranded; or

(3) in the case of a pesticide or device, when used in accordance with the requirements imposed under this Act and as directed by the labeling, it nevertheless causes unreasonable adverse effects on the environment.

In the case of a plant regulator, defoliant, or desiccant, used in accordance with the label claims and recommendations, physical or physiological effects on plants or parts thereof shall not be deemed to be injury, when such effects are the purpose for which the plant regulator, defoliant, or desiccant was applied.

(c) **DISPOSITION AFTER CONDEMNATION.**—If the pesticide or device is condemned it shall, after entry of the decree, be disposed of by destruction or sale as the court may direct and the proceeds, if sold, less the court costs, shall be paid into the Treasury of the United States, but the pesticide or device shall not be sold contrary to the provisions of this Act or the laws of the jurisdiction in which it is sold. On payment of the costs of the condemnation proceedings

APPENDIX C