

## NOTICES OF FINAL RULEMAKING

The Administrative Procedure Act requires the publication of the final rules of the state's agencies. Final rules are those which have appeared in the *Register* first as proposed rules and have been through the formal rulemaking process including approval by the Governor's Regulatory Review Council or the Attorney General. The Secretary of State shall publish the notice along with the Preamble and the full text in the next available issue of the *Register* after the final rules have been submitted for filing and publication.

### NOTICE OF FINAL RULEMAKING

#### TITLE 18. ENVIRONMENTAL QUALITY

#### CHAPTER 13. DEPARTMENT OF ENVIRONMENTAL QUALITY SOLID WASTE MANAGEMENT

##### PREAMBLE

- 1. Sections Affected**

Article 21 R18-13-2101 R18-13-2102 R18-13-2103	<b><u>Rulemaking Action</u></b> New Article New Section New Section New Section
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- 2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):**

Authorizing statute: A.R.S. § 49-104  
Implementing statute: A.R.S. § 49-747
- 3. The effective date of the rules:**

July 14, 2003
- 4. A list of all previous notices appearing in the Register addressing the final rule:**

Notice of Rulemaking Docket Opening: 7 A.A.R. 2401, May 31, 2002  
Notice of Proposed Rulemaking: 8 A.A.R. 3689, August 30, 2002
- 5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:**

Name:	Peggy Guichard-Watters, Section Manager
Address:	Arizona Department of Environmental Quality Waste Programs Division Solid Waste Section 1110 W. Washington Phoenix, AZ 85007
Telephone:	(602) 771-4117 or (800) 234-5677, enter 771-4117 (toll free in Arizona only)
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- 6. An explanation of the rule, including the agency's reason for initiating the rule:**
  - a. Reasons for initiating the rule:**

Arizona Revised Statutes (A.R.S.) § 49-747 requires each landfill to register annually with the Arizona Department of Environmental Quality (Department), and pay an annual registration fee. The fee is deposited into the Solid Waste Fee Fund, to help offset the Department's cost to administer the landfill inspection and compliance program. The registration fee for municipal solid waste landfills (MSWLFs) is based on the population served by each landfill during the preceding calendar year. By contrast, the registration fee for construction debris and industrial waste landfills is a flat fee of \$1,500 per landfill per year.

The accuracy with which the population served can be estimated has changed since the legislature enacted A.R.S. § 49-747 in 1990. At that time, local governments operated most MSWLFs, to comply with A.R.S. § 49-741. The Department approximated the population served by each MSWLF using that jurisdiction's census population. Only about a third of those landfills existing in 1990 remain open, and about a quarter of the remaining operating landfills

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have been sold to private companies. As a result, many local governments no longer operate their own landfills. Census population is no longer an accurate estimate of population served.

The method for estimating population served should reflect current waste management industry practices. Although some communities still haul their waste, many have contracted out this service to private haulers. The waste typically is taken to the nearest landfill that will accept the waste, to the nearest landfill charging the lowest tipping fee, or to a landfill that the hauler owns or operates. The landfill to which a hauler takes the waste may change at any time. Also, some landfills accept waste from other states and most receive waste generated by tourists, neither of which are included in the census figures. The Department's current approach is an ineffective way to audit the accuracy of the registration fees that the landfill operators are paying.

Table I was prepared to illustrate the probable inequities introduced by the current method of estimating population served. Table I reveals a lack of correlation between the reported tonnage of waste landfilled in 1999 and the corresponding registration fees paid for several MSWLFs for the year 2000. For example, the Apache Junction MSWLF operator paid a registration fee of \$5,000 for the year 2000, based on the estimated census population it serves, while landfilling 104,316.10 tons of waste in 1999. By comparison, the Adamsville MSWLF operator paid a \$1,500 registration fee, based on the estimated census population it serves, while landfilling 157,883.95 tons of waste. The Copper Mountain MSWLF operator paid a registration fee of \$750, based on the estimated census population of Yuma County minus the populations of the county's cities and towns, while landfilling 407,076.00 tons of waste.

The examples in Table I show that a landfill registration fee based on census population introduces inequities and places some landfills at a competitive disadvantage. To correct these inequities, the Department proposes a new approach for determining the population served. This rule will enable the Department and MSWLF operators to determine the population each landfill serves by dividing the amount of waste deposited in the MSWLF by an average per person per day waste disposal rate. Adopting this rule will provide a more accurate reporting of the population served by each MSWLF, and will also reflect tourist waste and out-of-state waste landfilled in Arizona. These results will translate into a more equitable annual registration fee for MSWLFs in Arizona. In addition, the Department will be able to more accurately audit the annual landfill registration fees.

Table 1. Comparison of Fees for Year 2000, and Fees Based on Three Different Waste Generation Rates.

MSWLF	Tons Landfilled	Population Served as Reported by Landfill	Fee Paid for 2000	Population Served and Registration Fee Based on Waste Generation Rate of:					
				4.44 Federal Rate		5.86 Recycling Report Rate		6.17 Proposed Disposal Rate	
				Pop. Served	Fee	Pop. Served	Fee	Pop. Served	Fee
Allied Waste - Apache Junction	104,316.10	>200K	\$ 5,000	128,738	\$ 3,000	97,542	\$ 2,000	92,641	\$ 2,000
Allied Waste - Lake Havasu City	59,368.61	25K-<50K	\$ 1,000	73,267	\$ 2,000	55,513	\$ 2,000	52,724	\$ 2,000
Allied Waste - Queen Creek	160,370.60	>200K	\$ 5,000	197,915	\$ 3,000	149,956	\$ 3,000	142,421	\$ 3,000
Allied Waste - Southwest Regional	287,980.48	>200K	\$ 5,000	355,400	\$ 5,000	269,279	\$ 5,000	255,749	\$ 5,000
Apache County - Blue Hills Regional	20,392.82	<10K	\$ 500	25,167	\$ 1,000	19,069	\$ 750	18,110	\$ 750
Arizona Strip	4,470.96	<10K	\$ 500	5,518	\$ 500	4,181	\$ 500	3,970	\$ 500
(City of) Casa Grande - Casa Grande	62,248.69	10K-<25K	\$ 750	76,822	\$ 2,000	58,206	\$ 2,000	55,281	\$ 2,000

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MSWLF	Tons Landfilled	Population Served as Reported by Landfill	Fee Paid for 2000	Population Served and Registration Fee Based on Waste Generation Rate of:					
				4.44 Federal Rate		5.86 Recycling Report Rate		6.17 Proposed Disposal Rate	
				Pop. Served	Fee	Pop. Served	Fee	Pop. Served	Fee
(City of) Chandler - McQueen	86,464.31	100K-<200K	\$ 3,000	106,707	\$ 3,000	80,849	\$ 2,000	76,787	\$ 2,000
Cochise County - Elfrida/Eastern Regional	62,969.89	100K-<200K	\$ 3,000	77,712	\$ 2,000	58,881	\$ 2,000	55,922	\$ 2,000
(City of) Eloy - Eloy	31,029.76	10K-<25K	\$ 750	38,294	\$ 1,000	29,015	\$ 1,000	27,556	\$ 1,000
(City of) Flagstaff - Cinder Lake	239,608.63	50K-<100K	\$ 2,000	295,704	\$ 5,000	224,048	\$ 5,000	212,791	\$ 5,000
Gambi Disposal - Cerbat	51,011.07	25K-<50K	\$ 1,000	62,953	\$ 2,000	47,698	\$ 1,000	45,302	\$ 1,000
Gila County - Buckhead Mesa/ Payson	25,436.20	25K-<50K	\$ 1,000	31,391	\$ 1,000	23,784	\$ 750	22,589	\$ 750
Gila County - Russell Gulch/ Globe	16,939.70	10K-<25K	\$ 750	20,905	\$ 750	15,840	\$ 750	15,043	\$ 750
(City of) Glendale - Glendale	313,093.49	>200K	\$ 5,000	386,392	\$ 5,000	292,761	\$ 5,000	278,051	\$ 5,000
Graham County - Graham County Regional	26,473.00	25K-<50K	\$ 1,000	32,671	\$ 1,000	24,754	\$ 750	23,510	\$ 750
(City of) Huachuca City - Huachuca City	31,821.27	10K-<25K	\$ 750	39,271	\$ 1,000	29,755	\$ 1,000	28,259	\$ 1,000
La Paz County - La Paz County	40,681.12	10K-<25K	\$ 750	50,205	\$ 2,000	38,039	\$ 1,000	36,128	\$ 1,000
Mohave County - Mohave Valley	57,184.75	25K-<50K	\$ 1,000	70,572	\$ 2,000	53,471	\$ 2,000	50,784	\$ 2,000
(City of) Phoenix - Skunk Creek	813,172.95	>200K	\$ 5,000	1,003,546	\$ 5,000	760,366	\$ 5,000	722,162	\$ 5,000
Pima County - Sahuarita	32,905.02	10K-<25K	\$ 750	40,608	\$ 1,000	30,768	\$ 1,000	29,222	\$ 1,000

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MSWLF	Tons Landfilled	Population Served as Reported by Landfill	Fee Paid for 2000	Population Served and Registration Fee Based on Waste Generation Rate of:					
				4.44 Federal Rate		5.86 Recycling Report Rate		6.17 Proposed Disposal Rate	
				Pop. Served	Fee	Pop. Served	Fee	Pop. Served	Fee
Pima County - Tangerine Road	79,233.94	100K-<200K	\$ 3,000	97,783	\$ 2,000	74,088	\$ 2,000	70,366	\$ 2,000
Santa Cruz County - Rio Rico	42,687.34	25K-<50K	\$ 1,000	52,681	\$ 2,000	39,915	\$ 1,000	37,909	\$ 1,000
Santa Cruz County - Sonoita/Elgin	1,144.00	<10K	\$ 500	1,412	\$ 500	1,070	\$ 500	1,015	\$ 500
(City of) Tucson - Los Reales	479,567.00	>200K	\$ 5,000	591,839	\$ 5,000	448,424	\$ 5,000	425,893	\$ 5,000
Waste Management - Adamsville	157,843.95	25K-<50K	\$ 1,500	194,797	\$ 3,000	147,594	\$ 3,000	140,178	\$ 3,000
Waste Management - Butterfield Station	976,106.74	100K-<200K	\$ 3,000	1,204,624	\$ 5,000	912,718	\$ 5,000	866,860	\$ 5,000
Waste Management - Copper Mountain	407,076.00	10K-<25K	\$ 750	502,377	\$ 5,000	380,800	\$ 5,000	361,516	\$ 5,000
Waste Management - Dudleyville	14,072.82	25K-<50K	\$ 1,500	17,367	\$ 750	13,159	\$ 750	12,497	\$ 750
Waste Management - Grey Wolf	188,858.00	100K-<200K	\$ 3,000	233,072	\$ 5,000	176,594	\$ 3,000	167,720	\$ 3,000
Waste Management - Northwest Regional	621,167.82	>200K	\$ 5,000	766,590	\$ 5,000	580,829	\$ 5,000	551,646	\$ 5,000
Waste Management - Pen Rob	97,781.42	25K-<50K	\$ 1,000	120,673	\$ 3,000	91,432	\$ 2,000	86,837	\$ 2,000
<b>Totals</b>	5,593,478.45		\$68,750	6,902,973	\$84,500	5,230,239	\$75,750	4,967,439	\$75,750

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b. Explanation of the rule:

This rule was proposed as Part A of Article 21, because at the time the Department anticipated a Part B rule. Since Part B is no longer anticipated in the foreseeable future, this final rule is set forth as Article 21, but is not presented as Part A of that Article.

This rule contains three landfill registration categories for MSWLFs. For two of the categories, the minimum fee listed in A.R.S. § 49-747 is used. For the third category, the rule establishes procedures for the Department to calculate the annual registration fee for an MSWLF based on the population served, by multiplying the waste disposal rate by the number of days in a defined time period, then dividing the total number of pounds of waste received by that MSWLF by the product of the first calculation. The rule also establishes the fee for registering an MSWLF that did not operate over the entire year.

Methodology for determining population served:

Under this proposed rule, the Department will convert the amount of waste disposed at an MSWLF, as reported on that MSWLF's quarterly landfill disposal fee invoices required by A.R.S. § 49-836, into the population served by that MSWLF. The annual registration fee is based on the population served.

To convert the amount of waste into population served, the Department will use an average waste disposal rate, that is, the average amount of solid waste produced by a person each day. The simplest way to calculate this rate would seem to be by dividing the total waste landfilled at all operating Arizona MSWLFs in a recent period by the total Arizona population for that period, and convert the units to obtain pounds per person per day. Unfortunately, because of several complicating factors, this simple approach will not yield the most realistic average waste disposal rate for Arizona.

The Department adjusted the landfilled waste and population figures to account for these complicating factors. These adjustments are discussed in detail in a report prepared by the Department's Solid Waste Section in January 2001, entitled "Calculating Population Served by Using a Waste Disposal Rate." The complicating factors which were adjusted are categorized into the three following general categories:

1. Non-Arizona residents' waste (excluded from study);
2. Specific MSWLFs excluded from study; and
3. Waste from Scottsdale, Mesa, and Chandler (included in study).

Waste disposal rate:

The Department will use a solid waste disposal rate of 6.17 pounds of waste per person per day. The Department developed the waste disposal rate from its own study of waste being landfilled in thirty-two Arizona MSWLFs. In conducting its study, the Department relied heavily on: existing data available from the Arizona Department of Economic Security's (DES) Population Statistics Unit, quarterly landfill disposal reports submitted to the Department by the MSWLFs, tourism statistics from the State Tourism Office, information contained in the Department's Recycling Program Annual Report for FY99, and information obtained from a telephone interview with staff of the U.S. Indian Health Service.

Calculating the waste disposal rate:

The formula used to calculate the waste disposal rate of 6.17 pounds per person per day is presented below:

$$(\text{Net Tons SW Landfilled/Year}) \times (2000 \text{ Pounds/Ton})$$

$$\text{Disposal Rate (pounds/person/day)} = \frac{\text{-----}}{\text{-----}}$$

$$(\text{Net Population}) \times (365 \text{ Days/Year})$$

Where:

$$\text{Net Tons SW Landfilled/Year} = 5,316,477.98$$

$$\text{Net Population} = 4,720,671$$

The figure for Net Tons SW Landfilled/Year in the formula was derived by adjusting the total tons of waste landfilled (5,593,478.45 tons) in the thirty-two MSWLFs used in the Department's study for 1999, as reported by the landfill operators, by subtracting the tons of out-of-state waste (422,395 tons) and tourist waste (249,118.63 tons) for 1999, and adding the tons of waste generated by Scottsdale, Mesa, and Gilbert (398,513.16 tons) for the same period. (These three jurisdictions dispose of their waste at a landfill on an Indian Reservation. Because the Department does not receive tonnage figures from landfills on Indian land, adding the amount of waste generated by those cities to the total amount of solid waste landfilled was necessary.) The resulting sum (5,316,477.98 tons) is the total adjusted amount of waste used in the Department's calculations to arrive at the 6.17 pounds per person per day waste disposal rate.

The Department derived the figure used for Net Population in the above formula by adjusting the state's total population (4,842,987 persons), as reported by DES for 1999, to take account of the following information being unavailable. First, the operators of four small MSWLFs (Ajo, Blue, Loma Linda, and Patagonia) elected to report the

population served by their landfills for 1999, rather than the amount of waste landfilled in their facilities, so the Department did not have the landfilled waste data for these four landfills for 1999. Second, federally-operated MSWLFs are exempt from reporting requirements to the Department. Therefore, the Department did not receive any information about the amount of waste disposed in the federal MSWLF located at the South Rim in Grand Canyon National Park. Due to the above absence of information, the populations of the communities served by the Ajo, Blue, Loma Linda, Patagonia, and Grand Canyon South Rim MSWLFs were subtracted from the state's total population, as reported by DES. Also, the populations of the six Indian reservations served by the five Indian-operated MSWLFs, and the figures for the Navajo Indian population excluded from the Department's survey, were subtracted from the state's total population, to arrive at the adjusted population for the Department's study of 4,720,671 persons.

Waste generation rates considered and rejected:

The U.S. Environmental Protection Agency (EPA) calculated a national average waste generation, for municipal waste, of 4.44 pounds per person per day. The federal government based its calculations on the sale of products rather than on how much waste was landfilled, and considered only those products most likely to result only in municipal waste. Since MSWLFs in Arizona accept municipal waste, construction debris, industrial waste, and agricultural waste, only a waste generation rate predicated on disposal of all these types of waste would represent the waste generation or disposal rate for the general population of Arizona. Furthermore, the federal rate does not necessarily exclude waste from nonresidents, such as tourists and winter visitors. Nor does any waste generation rate necessarily reflect the amount of waste disposed because of reuse and recycling efforts. For these reasons, the federal waste generation rate of 4.44 pounds per person per day is considered inappropriate to use for determining a waste disposal rate for Arizona.

According to the Department's "Recycling Program Annual Report" for FY99, Arizonans produce 5.86 pounds of municipal waste per person per day. Unlike the federal study, the Recycling Program's calculations were based on actual municipal waste landfilled in Arizona plus the amount of waste recycled or otherwise diverted from the landfill. Because construction debris and industrial waste were not included and tourist waste was not excluded from the waste figures used to generate the Recycling Program's waste generation rate of 5.86 pounds per person per day, this rate is also considered inappropriate for determining an equitable registration fee.

Resulting fee amounts:

Table 1 lists the thirty-two MSWLFs used in the Department's study, the amount of waste landfilled in 1999 at each MSWLF, the corresponding population served according to the landfill operator, and the annual registration fee paid for the year 2000. Table 1 also shows the landfill registration fees that would have been paid for each landfill for the year 2000, had the waste disposal rate of 6.17 pounds per person per day been used to calculate the population served. The theoretical impact on landfill registration fees paid for each landfill was determined by comparing the actual fee paid for each landfill for the year 2000 (based on the landfill operators' figures for populations served) to the fee that would have been paid for each landfill had the population served been determined using the 6.17 waste disposal rate. Totaling the figures for the individual theoretical economic impact provided the total theoretical impact of using the waste disposal rate of 6.17 pounds per person per day for each landfill. From Table 1, using the waste disposal rate of 6.17 pounds per person per day would have resulted in a net increase of \$7,000 in registration fees collected for the year 2000.

Structure of the fee rule:

The fee rule set forth below is structured so that R18-13-2102(C) describes how a fee is set, and R18-13-2103(C) sets the fee.

Following the public comment period, a member of the Governor's Regulatory Review Council staff asked for clarification of the conversion in R18-13-A2102(B)(1)(b) (now R18-13-2102(B)(1)(b)), which reads:

"For an MSWLF that reports units of compacted or uncompact solid waste received on the disposal fee invoice, multiply the volume of solid waste reported for the fee required under A.R.S. § 49-836(A)(1) by 2,000."

The invoice referenced requires solid waste facilities that measure waste volume, rather than waste weight, to convert their volume into "units" for reporting purposes. The invoice follows the conversion factors provided in A.R.S. § 49-836(A)(1) to convert waste volume into equivalent "units," which are subsequently multiplied by cubic yards of compacted solid waste. According to that statute, six cubic yards of uncompact solid waste, and three cubic yards of compacted waste, both equal a ton. The invoice requires the volume to be reported in units, which are defined on the form as six cubic yards of uncompact solid waste, or three cubic yards of compacted solid waste. It is these units that are referred to when the rule language says to "multiply the volume of solid waste reported." Volume reported on the invoice for the fee is in units of three cubic yards of compacted waste or six cubic yards of uncompact waste. Volume reported on the invoice is in units that each weigh a ton, which the rule in question then requires to be multiplied by 2,000 to convert the volume to pounds. For example, 12 cubic yards of uncompact waste would be reported on the fee invoice as equaling two units (one unit for every 6 cubic yards of uncompact solid waste). Two units (the same as two tons) would be multiplied by 2,000 to equal 4,000 pounds.

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Conclusions:

The result of using a higher waste disposal rate to extrapolate the population served by any given landfill facility is a lower calculated population served. Because the annual registration fee for an MSWLF is based on population served, the resulting registration fee will decline as the waste disposal rate increases.

The Department believes the waste disposal rate of 6.17 pounds per person per day is fair and reasonable because it includes all the waste types currently accepted in Arizona MSWLFs. It further believes the adjustments made to the waste and population figures used in the calculation of the waste disposal rate were necessary and reasonable, and that the resulting waste disposal rate of 6.17 pounds per person per day is more realistic than either the federal generation rate of 4.44 pounds per person per day or the Recycling Program generation rate of 5.86 pounds per person per day, for calculating registration fees based on population served. Finally, the selected waste disposal rate will result in more equitable annual landfill registration fees with no significant economic impact to the landfill operators either collectively or individually.

It should also be noted that a landfill has the potential to lower its registration fee by initiating or improving a reduce, reuse and recycling program, which would result in calculating a lower population served. By diverting waste from the landfill, the amount of waste landfilled is reduced, which could place the landfill into a lower population-served category.

**7. A reference to any study relevant to the rule that the agency reviewed and either relied on in its evaluation of or justification for the rule or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

- a. Arizona Department of Environmental Quality, Solid Waste Section. "Calculating Population Served by Using a Waste Disposal Rate." January, 2001. The data underlying this study and analysis of the study are discussed following Table 1 of this preamble.
- b. Arizona Department of Environmental Quality, Solid Waste Section. "Recycling Program Annual Report." December, 1999. The data underlying this study and analysis of the study are discussed in this preamble under "Waste generation rates considered and rejected."

The public can obtain a copy of or review these studies at the address (and through the person) listed in item #5.

**8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable; this rule will not diminish a previous grant of authority of a political subdivision of this state.

**9. The summary of the economic, small business, and consumer impact:**

**a. Identification of the rulemaking:**

This rulemaking pertains to the annual registration fees that Municipal Solid Waste Landfills pay, as required by A.R.S. § 49-747. The rulemaking creates new rules to be codified in Title 18, Chapter 13, Article 21.

**b. Brief summary of the information included in the economic impact statement:**

Introduction:

In accordance with A.R.S. § 41-1055(C), the Department acknowledges that adequate data are not reasonably available to accurately assess economic, small business, and consumer impact. This is due to the difficulty of estimating how each MSWLF sets waste disposal fees, and the extent to which an MSWLF will pass the changes in fees to their direct customers and extended customer base. The following describes the limitations of the data and the methods employed to try to estimate the proposed rule's costs and probable impacts on landfill owners and operators, small businesses, and consumers.

Landfill owners and operators:

Table I compares the actual fee paid for each of the thirty-two landfills for the year 2000 to the fee that would have been paid for each landfill had the population served been determined using the proposed 6.17 waste disposal rate. Table I shows the economic impact of using the proposed waste disposal rate of 6.17 pounds per person per day; there would have been a net increase of \$7,000 in registration fees collected for the year 2000.

This \$7,000 would be a nine-percent increase in the total fees collected. As Table I shows, not all MSWLFs would have increased fees, and fees would not be increased uniformly. The greatest fee increase would be \$5,000, and the greatest decrease would be \$3,000. On average, the fee would increase \$218.75, based on the thirty-two landfills used in the study.

Table 1 does not account for all the MSWLFs in Arizona. As of July 1, 2002, forty-six MSWLFs are required by A.R.S. § 49-747 to register annually and pay an annual registration fee. This includes the thirty-two MSWLFs in the study, seven inactive MSWLFs, who pay the minimum fee of \$500, four MSWLFs excluded from the study because they did not report the information needed for the study, two federal MSWLFs and one landfill that has opened since the survey was conducted. "Inactive," as used in the second sentence above, is defined as not accepting waste, or

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which has accepted waste for less than a full quarter, but that has not gone through formal closure of the landfill. The Solid Waste Program continues to register and track these landfills, thereby incurring administrative costs.

The cost to operate an MSWLF includes many factors, only one of which is the annual fee. It is unlikely that the change in fees will have a significant impact on the operations of an MSWLF.

Small businesses:

One category of small businesses that might be affected by a change in how MSWLF fees are determined is waste haulers. MSWLFs may or may not pass increases to waste haulers, as tipping fees. Tipping fees are determined by considering many factors, only one of which is the MSWLF's annual fee. ADEQ does not track the number of solid waste haulers in Arizona. Further, estimating or predicting when a specific hauler would use a particular MSWLF is difficult. An additional limitation on estimating costs, in compliance with A.R.S. § 41-1055(B), is the impossibility of determining how many waste haulers are small businesses. The Department was unable to estimate the impact of this proposed rulemaking on waste haulers who are small businesses.

Another category of small businesses that might be affected by a change in how MSWLF fees are determined is small businesses who pay waste haulers to remove their waste. Waste haulers may or may not pass the change in tipping fees that they pay to their customers, including customers who are small businesses. The uncertainties in estimating the impacts of this rulemaking on waste haulers makes it impossible to predict how small businesses who are the customers of waste haulers will be affected.

Consumers:

The Department is unable to estimate the impact of this rulemaking on consumers. In part, this is because determining the number of consumers is impossible, because of the overlap in their use of MSWLFs. The MSWLFs customer base includes residents, businesses, and organizations with offices in the state. Many consumers exist in more than one of these categories, and so the impact on them would be different from the impact on a consumer who existed in only one category.

Conclusion:

In spite of the difficulty in estimating the number of consumers and small businesses affected by this rulemaking, the Department believes that the impact on an individual consumer or small business will be very small. This is because the net difference in actual fees and the MSWLF fees that would have been paid had this rule been in effect in 2000 is only \$7,000. If this \$7,000 were distributed equally across the 4,734,198 population used to calculate the waste disposal rate, the result is only pennies per year.

The change in how MSWLF annual fees are determined will benefit the state by more accurately reporting the population served by each MSWLF, including a reflection of tourist waste and out-of-state waste landfilled in Arizona. This should translate into more equitable annual registration fees for MSWLFs. In addition, the Department will be able to more accurately audit the annual landfill registration fees.

The proposed rulemaking may improve environmental quality. The current fee structure favors landfills in unpopulated areas, and slants landfill site selection. If site selection was based on geologic setting or proximity to population served, rather than on fees, the environment would benefit. Siting landfills in unpopulated areas makes hauling distances longer, wasting fuel, and contributing to air pollution, road deterioration and traffic.

**10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):**

Only technical and grammatical changes were made between the proposed rules and final rules.

**11. A summary of the comments made regarding the rule and the agency response to them:**

The Notice of Proposed Rulemaking published August 30, 2002, invited public comment and gave notice of a public hearing. Ten people attended the hearing, held on October 1, 2002. Nine were Department staffers. One member of the public gave testimony at the hearing to support the proposed rulemaking. No written comments were received during the comment period, which ended October 4, 2002.

**12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:**

Not applicable

**13. Incorporations by reference and their location in the rules:**

Not applicable

**14. Was this rule previously made as an emergency rule?**

No

**15. The full text of the rules follows:**



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TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 13. DEPARTMENT OF ENVIRONMENTAL QUALITY  
SOLID WASTE MANAGEMENT

ARTICLE 21. ~~RESERVED~~ MUNICIPAL SOLID WASTE LANDFILLS

Section

R18-13-2101. Definitions

R18-13-2102. Formula for Calculating Annual Registration Fee for an Existing Municipal Solid Waste Landfill

R18-13-2103. Annual Landfill Registration: Due Date and Fees

ARTICLE 21. ~~RESERVED~~ MUNICIPAL SOLID WASTE LANDFILLS

**R18-13-2101. Definitions**

In addition to the definitions in A.R.S. §§ 49-701 and 49-701.01, for the purpose of this Article, the terms used in this Article have the following meanings:

1. “Defined time period” means the 12-month period that begins on July 1 of a calendar year and ends on June 30 of the following calendar year and consists of the actual number of calendar days in that 12-month period.
2. “Disposal fee invoice” means the quarterly landfill disposal fee invoice the Department mails to a landfill operator, on which the landfill operator indicates the amount of waste received and the amount of the disposal fees owed to the Department as required under A.R.S. § 49-836.
3. “Full quarter” means any of the standard fiscal quarters of the defined time period for which a municipal solid waste landfill accepted waste on or before the first day of the quarter and on or after the last day of that quarter.
4. “Waste disposal rate” means the average amount of waste disposed in this state by a person daily, which the Department has calculated to be 6.17 pounds per person per day.

**R18-13-2102. Formula for Calculating Annual Registration Fee for an Existing Municipal Solid Waste Landfill**

**A.** For an existing municipal solid waste landfill, except those described in subsection (C), the Department shall calculate the annual registration fee under A.R.S. § 49-747 after calculating the population served by that municipal solid waste landfill, as follows:

1. Multiply the waste disposal rate by the number of days in the defined time period, and
2. Divide the total number of pounds of waste received by the municipal solid waste landfill by the product from subsection (A)(1).

**B.** The Department shall determine the number of pounds of waste received by a municipal solid waste landfill by one of the following methods:

1. For a municipal solid waste landfill that accepted waste over the entire defined time period and:
  - a. Reported tons of solid waste received on the disposal fee invoice, multiply the number of reported tons by 2,000; or
  - b. Reported units of compacted or uncompacted solid waste received on the disposal fee invoice, multiply the volume of solid waste reported under A.R.S. § 49-836(A)(1) by 2,000; or
2. For a municipal solid waste landfill that accepted waste for only a portion of the defined time period, but no less than a full quarter, the Department shall project the total amount of waste that would have been received by the landfill over the entire defined time period, using one of the following methods:
  - a. For a municipal solid waste landfill that reported receiving waste for at least a full three quarters but less than the entire defined period, the amount of waste for the remaining quarter is the total amount of the waste reported for the full three quarters divided by three;
  - b. For a municipal solid waste landfill that reported receiving waste for at least a full two quarters but less than three quarters, the amount of waste for the remaining two quarters is the same as the total amount of waste reported for the two full quarters; or
  - c. For a municipal solid waste landfill that reported receiving waste for at least one full quarter but less than two quarters, the amount of waste for the remaining three quarters is the total of the amount of the waste reported for the full quarter multiplied by three.

**C.** For a municipal solid waste landfill that accepted waste for less than a full quarter, the annual landfill registration fee is the minimum fee specified in A.R.S. § 49-747(C).

**R18-13-2103. Annual Landfill Registration: Due Date and Fees**

**A.** An operator of a new municipal solid waste landfill shall register the municipal solid waste landfill and pay the landfill registration fee as follows:

1. The operator shall pay the initial landfill registration fee within 30 days of the date that the Department approves the facility plan. The initial landfill registration fee is the minimum fee specified in A.R.S. § 49-747(C).

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2. Registration is valid for one year, except if the landfill is initially registered during October, November, or December of a calendar year, the next landfill registration due date is December 31 of the following calendar year and each calendar year thereafter unless released from the annual landfill registration requirement as specified in subsection (C).
  3. The annual registration fee remains the minimum fee rate under A.R.S. § 49-747(C) until the first annual registration period after the first full quarter of the defined time period.
- B.** After the first full quarter, the Department shall calculate the annual registration fee according to R18-13-2102, and specify the fee on the Department's annual landfill registration invoice for the municipal solid waste landfill. The Department shall calculate and the municipal solid waste landfill shall pay the annual landfill registration fee until the first registration period after the municipal solid waste landfill stops accepting waste during a fiscal quarter of the defined time period.
- C.** From the time a municipal solid waste landfill stops accepting waste as specified in subsection (B), until the owner or operator of the municipal solid waste landfill is released from its obligation to provide financial assurance for closure as required by A.R.S. §§ 49-761 or 49-770, the annual registration fee is the minimum fee specified in A.R.S. § 49-747(C).