

## CHAPTER IV - SECTION D

### ENVIRONMENTAL COMPLIANCE

#### A PURPOSE OF THIS CHAPTER

This chapter identifies the primary Federal environmental statutes and implementing regulations potentially applicable to ARS facilities and operations. It also describes general ARS policies, responsibilities, and procedures for complying with these environmental requirements. Extensive coverage is not given to the requirements of the additional--sometimes conflicting--requirements of State and local authorities that may also be applicable. Nor are the requirements of laws and regulations described in the environmental planning, environmental protection, and pollution prevention chapters of this section discussed again, even when they have important compliance components.

The contents of this chapter are consistent with Executive Order (E.O.) 12088, which sets forth specific requirements for Federal agencies with regard to prevention, control, and abatement of environmental pollution at their facilities, and E.O. 12580 which provides Superfund implementation guidance.

The information in this chapter is drawn from many sources, including the statutes, their implementing regulations, relevant executive orders, and Departmental Manual (DM) 5600-1, Environmental Pollution, Control, and Abatement Manual. DM 5600-1 establishes USDA's compliance policy for many of the laws and regulations discussed in this manual.

In many cases, it is USDA policy to voluntarily comply with statutory and regulatory requirements even when Federal agencies might otherwise be exempt from those requirements. Examples of this policy of voluntary compliance can be found in the hazard communication and pesticide programs.

## B PURPOSE OF ENVIRONMENTAL COMPLIANCE

This component of environmental management entails meeting or bettering minimum standards promulgated or established in Federal, State, and local statutes, laws, ordinances, regulations, orders, permits, and other applicable environmental requirements. It is aimed directly at achieving the goal of operating within the constraints of these environmental requirements, thereby helping to advance the resource-stewardship objectives

## B PURPOSE OF ENVIRONMENTAL COMPLIANCE (Continued)

developed during environmental planning and protection activities.

Environmental compliance is distinguished from environmental planning and environmental protection in this chapter. Environmental compliance focuses on meeting or bettering standards, while environmental planning and protection aim primarily at procedures, resources, and environmental values.

Compliance activities can be either substantive or procedural, and they may also be undertaken to demonstrate leadership. Most laws and regulations have compliance requirements. Examples of these requirements are those for upgrading and monitoring of underground storage tanks, meeting intergovernmental coordination requirements in E.O. 12372, inventorying facilities for hazardous waste disposal activities under RCRA Section 3016 authority, paying permit and inspection fees under the Clean Air and Water Acts and the Federal Facility Compliance Act, providing public or other notice of certain proposed actions under the National Environmental Policy Act, meeting effluent limitations and stormwater discharge requirements under the Clean Water Act, and obtaining permits or identification numbers under a variety of acts.

## C ORGANIZATION AND SCOPE

As noted above, this chapter focuses on complying with the requirements of the principle Federal environmental statutes and their implementing regulations. Accordingly, after a general discussion of the need for, and possible consequences of, noncompliance, each of the ARS environmental management programs associated with the primary Federal statutes is discussed in turn. State or local requirements may be mentioned or discussed, but the scope of this chapter is limited to Federal requirements.

## D LEGAL REQUIREMENTS

Failure to comply with legal requirements or follow Executive Branch policy statements and guidance documents concerning environmental compliance can have serious consequences for ARS and the responsible individuals. These consequences can include enforcement actions and civil and criminal sanctions, including substantial fines and imprisonment. Even though the Area Director is responsible for overall compliance with a specific Area, the handler, supervisor, or manager of a Location, facility,

unit, or operation can be

## D LEGAL REQUIREMENTS (Continued)

prosecuted in cases of willful violations of environmental laws and regulations.

All ARS personnel must act within the scope of their duties to be eligible for the legal protection of the agency, and violation of any Federal, State, or local law or regulation is not within the scope of any employee's duties.

Non-compliance with, or violation of, any environmental requirement may, as provided in the governing law, result in the regulatory agency (e.g. EPA, Justice Department, State, or local government) taking any of the following actions:

- o Issuance of a warning letter;

- o Issuance of an administrative order;

- o Assessment of an administrative civil penalty;

- o A permit action;

- o Institution of a civil action; and

- o Institution of a criminal action.

In most laws, the monetary sanctions for non-compliance or violation depend on the potential for harm and the extent and frequency of deviation from the requirement. Using the U.S. EPA-RCRA: Compliance/Enforcement Guidance Manual as the source, some examples of monetary penalties for violations are:

- o Non-compliance with RCRA can result in civil sanctions which include \$25,000 each day and an injunction;

- o Withholding or falsifying information required by RCRA can result in criminal sanctions which include \$25,000 each day and one year imprisonment;

o Willfully or negligently violating a RCRA requirement can result in a criminal sanction of \$50,000 each day and two years imprisonment.

As clarified for RCRA in the Federal Facilities Compliance Act of 1992, ARS can be tried in Federal or State civil court for violations of RCRA. Depending on the circumstances of a given case, U.S. Department of Justice (DOJ) representation may be available to ARS employees, and ARS could be substituted for that

#### D LEGAL REQUIREMENTS (Continued)

individual in civil proceedings. However, if found to be acting outside the scope of their duties, ARS officials or employees can be civilly or criminally prosecuted without agency or DOJ support or representation, as occurred in the Aberdeen Proving Grounds case. Clearly, self-interest dictates operating and managing facilities within the terms of applicable requirements. Listed below are maximum civil and criminal penalties for violating several other Federal environmental requirements.

#### Law

Resource Conservation and Recovery Act

Federal Insecticide, Fungicide, and Rodenticide Act

Toxic Substances Control Act

Comprehensive Environmental Response, Compensation, and Liability Act

Title III, Superfund Amendments and Reauthorization Act

Clean Air Act

Clean Water Act

Safe Drinking Water Act

Non-compliance

\$25K/day

Injunction

\$1K

\$25K/day

Injunction

\$25K/day

\$25K/day

\$25K/day

Injunction

Injunction

\$5K/day Com-  
pliance Order

Willful or negligent  
violation

\$50K/day  
2 years in prison

\$1K  
1 month in prison

\$25K/day  
1 year in prison

\$25K/day

1 year in prison

\$25K/day

\$25K/day

1 year in prison

\$25K/day

1 year in prison

N/A

Withheld or falsified  
information

\$25K/day

1 year prison

N/A

N/A

\$25K/day

1 year prison

\$25K/day

2 years prison

\$10K/day

6 months in prison

\$10K/day

6 months in prison

N/A

## E APPLICABLE SET OF ENVIRONMENTAL STANDARDS

A list of all possible applicable environmental standards for a given Location would be very long, if all the environmental statutes, laws, regulations, policies, directives, procedures, etc., on the books were included. Exhibit 1 to this chapter and the checklist in section D of chapter VI are provided--not as "the list" of "applicable" standards--but as a reference list or guide to help determine which Location operations might be subject to some environmental requirement or substantive or procedural standard. Procedural requirements specify a process to be followed (e.g., NEPA, Executive Orders, and OMB Circular A-106). Substantive requirements are objective standards for, or limits on, specific actions, activities, or environmental media (e.g., emission limits, reportable quantities, and primary drinking water standards).

The Area Safety and Occupational Health Manager should be consulted when determining which Location operations require compliance with an environmental standard. Refer to Section F - The Nine Steps to Environmental Compliance for a general model for examining overall environmental compliance at a Location.

## F THE NINE STEPS TO ENVIRONMENTAL COMPLIANCE

These nine steps to compliance can assist in identifying and following many of the environmental requirements. However, these steps are only a tool to access the applicable requirements, not a substitute for careful reading and implementation of specific regulatory requirements.

The nine steps are:

1 Find out what you do or have. This includes:

a Looking around the Location/property for obvious potentially hazardous conditions or regulated units, such as underground storage tanks, hazardous waste generation, oil spills, incinerators, fume hoods, archaeological sites, wetlands, etc.

b Determining the kind of "setting" in which the facility is located (e.g., industrial, residential, rural, urban).

c Identifying existing and planned buildings (e.g., a historical building or a planned Biolevel 4 laboratory).

#### F THE NINE STEPS TO ENVIRONMENTAL COMPLIANCE (Continued)

d Identifying the support facilities/units present (e.g., paint shop, welding shop, electrical substation, pesticide washdown, dishwashing).

e Identifying the operations carried out or planned (e.g., Biolevel 4 research, pesticide application, etc.).

f Determining the number, employers, and job classifications of people working at the facility.

g Determining the issues of local importance (very critical for developing community awareness programs/briefing papers).

2 Find out what you do or have that is or may be regulated. This includes, but is not limited to, looking at:

- o Construction projects
- o Research projects
- o Sewage disposal
- o Hazardous waste management
- o Underground storage tanks
- o Air pollutant emissions
- o Water supply
- o Incinerators

- o Wetlands
- o Historical/archaeological sites
- o Polychlorinated biphenyls
- o Pesticide use
- o Irrigation water withdrawals
- o Transporting hazardous waste
- o Treating/storing/disposing hazardous waste
- o Trash disposal
- o Spills and other releases
- o Wastewater discharges
- o Stormwater discharges
- o Asbestos use or removal
- o Land use
- o Oil disposal sites
- o Hazardous substances
- o Waste oil
- o Surface impoundments
- o Septic tanks/injection wells
- o Fuel-burning equipment
- o Endangered species/critical habitat
- o Infectious/medical waste
- o Radiological mixed waste

## F THE NINE STEPS TO ENVIRONMENTAL COMPLIANCE (Continued)

3 Find out what and whose rules may or do apply. These may include:

- o Federal (EPA, Fish and Wildlife Service, Army Corp of Engineers, DOT, FAA, GSA, DOE, OMB, etc.)

- o State

- o Local (zoning, fire, etc.)

- o Regional or interstate

- o International

Refer to the different references/sections of this manual for names, addresses, and phone numbers of regulatory agencies or organizations that operate regulatory programs or may be able to help.

4 Find out the what, when, and how of required regulatory/compliance action.

Review the regulations and compare them to the actual situation/facility/operations to determine:

o if a permit is required.

o if records/periodic reports are required.

o if an external review or approval is required before an operation is put on line.

o if public hearings are required.

o what procedures have to be followed.

o when action (i.e., reporting, recording, reviewing, etc.) are required to happen.

5 Define who will be responsible for doing what, when and how. This step includes:

o developing a detailed plan of action, statement of work, cost estimate, etc.

o giving/getting authority, approvals, any needed permits, and funding for the needed project.

o assigning responsibilities.

F THE NINE STEPS TO ENVIRONMENTAL COMPLIANCE (Continued)

o identifying/committing required resources in the applicable timeframes.

6 Do it!! This includes executing the plan of action and other items in Step 5.

7 Check for rule changes now and again. This step is critical because:

o something previously unregulated may come under regulation.

o requirements may change.

o ignorance of requirements is neither excuse nor bliss.

8 Keep doing it! There is no such thing as "laurels" when it comes to environmental compliance. Credibility, however, is a useful, gainable item.

9 Document the other 8 steps. Being able to demonstrate that environmental requirements were identified and met is often just as important as actually meeting them.

ARS policy requires that all environmental related documents be maintained for 30 years. Refer to the ARS Record Retention Directive for specific details.

## G ARS CLEAN AIR PROGRAM

### 1 Purpose

To provide direction for implementing an ARS Clean Air Program; to define actions to identify and evaluate facilities at ARS facilities which may be in noncompliance with the Clean Air Act; and to implement corrective actions where necessary to achieve facility compliance with air quality standards and implementation plans.

### 2 Scope

The provisions of this section apply to all ARS facilities. To the extent provided by law or contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of air pollution in Federal, State, and local requirements, whether or not they are outlined in this chapter.

G ARS CLEAN AIR PROGRAM (Continued)

3 Objectives

Objectives of this program are to:

a Identify, control, and monitor air pollution sources owned, operated, or otherwise under the control of ARS facilities;

b Determine the types and quantities of pollution emissions from these sources and applicable requirements;

c Control pollution levels in compliance with applicable regulations;

d Procure commercial equipment and vehicles that meet applicable regulations;

e Ensure that facilities are designed, operated, and maintained to meet Clean Air Act (CAA) program standards and requirements, including those in State Implementation Plans (SIP's);

f Monitor ambient air quality in the vicinity of ARS activities in accordance with applicable regulations, if necessary;

g Control emissions from mobile sources under ARS control through good maintenance and compliance with applicable regulations;

h Cooperate with EPA and State and local authorities to achieve the objectives of the Clean Air Act;

i Develop and utilize maintenance schedules, operating procedures, and monitoring systems for specific facilities and other ARS activities in coordination with other Federal, State and local authorities;

j Obtain permits for regulated air pollutant sources and use trained/licensed operators as necessary.

#### 4 Policy

All facilities owned, operated, or otherwise under ARS control will comply with all applicable Federal, State, interstate, regional, and local requirements, permits, administrative orders, processes, and sanctions regarding the control and abatement of air

pollution and compliance with SIP's. This applies

G ARS CLEAN AIR PROGRAM (Continued)

to both substantive and procedural requirements. This also applies to the payment of fees which are directly related to the facility review or permitting process, and that are generally applicable.

## 5 Definitions

Refer to the statute or Code of Federal Regulations, Title 40, Code of Federal Regulations, Parts 1 through 99 (40 CFR 1-99) for definitions of specific terms.

## 6 Responsibilities

a Area Directors will:

(1) Develop a program to ensure that Area/Location activities comply with all requirements of Federal,

State, and local regulatory authorities, including obtaining any necessary air permits.

(2) Ensure that air resource staff, program managers, and air pollutant emitting equipment are properly trained and, if required, licensed.

(3) Conduct periodic reviews of Location air pollution abatement programs to evaluate:

(a) Adequate protection of human health and welfare and the environment.

(b) Compliance with applicable regulations and construction and operating permits.

(4) Ensure that adequate funding for compliance is requested in the Area budget.

(5) Cooperate with State and local air quality agencies in the monitoring and control of air pollution from fixed and mobile sources.

## G ARS CLEAN AIR PROGRAM (Continued)

### 7 Summary of Key Provisions of the Clean Air Act

#### a General

The basic purpose of the Clean Air Act is to protect and enhance the quality of the Nation's air resources so as to promote and maintain public health and welfare and the productive capacity of its population. The Environmental Protection Agency (EPA) is responsible for setting air quality standards and establishing minimum program requirements.

Major sections or provisions of the CAA include the following:

(1) National Primary and Secondary Ambient Air Quality Standards (NAAQS).

(2) State Implementation Plans (SIP's).

(3) Performance standards for new stationary sources and modifications of existing sources

(4) Operating permits for new and existing air pollution sources.

(5) Air toxics.

(6) Acid precipitation.

(7) Stratospheric ozone.

(8) National emission standards for hazardous air pollutants.

(9) Inspection and monitoring.

(10) Emission standards for mobile sources, including motor vehicle emission and fuel standards.

(11) Prevention of Significant Deterioration (PSD) of air quality.

Several of these programs (i.e., air toxics, operating permits, emissions trading, acid precipitation, etc.) were added by the 1990 CAA amendments, and their implementation--and effect--have yet to be fully felt. A major

driving force for air pollution regulation is

the continuing failure of many parts of the

GARS CLEAN AIR PROGRAM (Continued)

country to attain the NAAQS's. The primary pollutants of concern at this time are oxides of nitrogen, volatile organic compounds, ozone, carbon monoxide, and particulate matter below 10 micrometers aerodynamic diameter ( $PM_{10}$ ).

The Clean Air Act gives primary authority for responsibility for managing and operating the Federal air pollution control programs to State and local governments. In addition, many regional, State and local authorities have passed laws and promulgated regulations setting standards for air pollution prevention and control with which ARS must comply. In general, State and local plans are contained in the SIP's, which must be approved by EPA.

States also have primary responsibility for conducting inspections and for initiating enforcement actions. For an individual facility or activity, the impacted Location should consult with State, regional, and/or local air pollution control agencies and refer to specific State standards or requirements which may be applicable. Locations may also seek technical assistance from States in determining compliance actions which may be needed.

#### b Air Quality Standards

National standards and requirements have been promulgated for prevention and control of air pollution from various sources, both stationary and mobile.

Applicable standards are summarized herein.

##### (1) National Primary and Secondary Ambient Air Quality Standards

National primary ambient air quality standards define levels of air quality which the Administrator of EPA judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define the levels of air quality that are necessary to protect public welfare. National primary standards have been issued for carbon monoxide. National

primary and secondary standards have been

issued for particulate matter, sulfur dioxide, ozone, nitrogen dioxide and for

## G ARS CLEAN AIR PROGRAM (Continued)

lead. States may establish standards that are more stringent than National standards. Detailed requirements are in 40 CFR Part 50.

### (2) National Emission Standards for Hazardous Air Pollutants (NESHAP)

Emission standards for hazardous air pollutants from major stationary sources have been issued for a number of pollutants, including mercury, vinyl, chloride, asbestos and for equipment leaks (fugitive emission sources). Additional standards are under development. See 40 CFR Part 61 for details. The air toxics title of the 1990 CAA amendments will significantly alter the NESHAP program.

### (3) Performance Standards for New Stationary Sources and Modifications of Existing Sources

Standards of performance have been issued for numerous types of facilities. Most of these standards may not be applicable to the Department's operations. However, standards should be reviewed to determine applicability for a particular facility. This should include coordination with State and local agencies. However, standards for incinerators are included in this category, and could be applicable to some ARS facilities. The standards include data on particulate matter requirements, monitoring of operations, and test methods and procedures. See 40 CFR Part 60 for details.

#### (4) Emission Standards for Mobile Sources

Mobile sources such as aircraft and automobiles are subject to standards that have been issued by the EPA. Standards for control of air pollution from motor vehicles and motor vehicle engines and aircraft and aircraft engines are contained in 40 CFR Parts 85, 86, and 87.

#### G ARS CLEAN AIR PROGRAM (Continued)

#### (5) Prevention of Significant Deterioration (PSD)

The Clean Air Act provides for the protection of air quality in areas with clean air by limiting the degree to which development can reduce existing air quality. The PSD limits, where applicable, are applied in addition to attainment and maintenance of all National ambient air quality standards. The PSD program is particularly important in preserving and protecting the air quality in attainment areas and mandatory Class I areas, such as national parks. However, compliance with the national ambient air quality standards is important regardless of the area classification.

#### (6) Source Surveillance

State Implementation Plans (SIP's) contain provisions for testing, inspections, investigations, and detection and procedures for maintaining records and submitting reports. See 40 CFR Part 51 for details.

#### (7) State Implementation Plans

These plans serve as the basic vehicle for implementation, maintenance, and enforcement of air quality standards. These plans, which are developed by States and approved by the EPA, provide the control strategies for attainment and maintenance of the National standards.

Plans must provide for the attainment of a primary standard as expeditiously as practicable, but in no case, later than three years after the date of approval by EPA, unless approved extensions are received. Attainment of a secondary standard shall be by a specific date, which is within a reasonable time after the date of EPA approval. State Implementation Plans also establish requirements for compliance standards for individual sources, emission limitations, review procedures for new sources and source modifications, air pollution

emergency episodes and for source

G ARS CLEAN AIR PROGRAM (Continued)

surveillance including inspections, monitoring, and testing.

State Implementation Plans provide for all areas of a State to be designated as attainment, nonattainment, and unclassified. Attainment areas are further classified as Class I, II or III. Class I areas were designated by Congress. Those Class I areas where visibility has been determined to be an important value are listed in 40 CFR Part 81, Subpart D. Class I areas are of particular importance to the Federal land manager who has a direct affirmative responsibility to protect the air quality related values of such areas and to consider, in consultation with EPA, whether a proposed source or modification will have any adverse impact on the lands. Federal land managers should also consult with States on designated Class area issues. Details on SIP's are covered in 40 CFR Parts 51 and 52.

(8) Operating permits for new and existing air pollution sources.

(9) Air toxics.

(10) Acid precipitation.

(11) Stratospheric ozone.

8 Compliance with Standards

a General

Section 118 of the Clean Air Act requires that each Department and/or Agency of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge of air pollutants, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of air pollution in the same manner, and to the same extent as any non-government entity. The above applies to any requirement whether

substantive or procedural (including any recordkeeping or reporting requirements, and

G ARS CLEAN AIR PROGRAM (Continued)

requirements respecting permits and any other requirements whatsoever).

b State Implementation Plans (SIP's)

Federal facilities are required to comply with the air pollution standards in the approved SIP for the Region, State or community in which they are located. If Regional, State or local standards are not prescribed for a particular location or if the Regional, State or local standards are less stringent or would result in non-attainment of the National standards promulgated by the EPA, the more stringent standards shall apply. No Department or agency of the Federal Government shall engage in, support in any way, or provide financial assistance, license or permit, or approve any activity which does not conform to a SIP. The air quality control regions are listed in 40 CFR Part 81, Subpart B.

c Existing Facilities

(1) State Implementation Plans. These plans contain legally enforceable compliance schedules establishing dates by which all major stationary and mobile sources of air pollution must be in compliance with any applicable requirement of the plan. All actions necessary to have existing Federal facilities or activities conform with applicable standards shall be in accordance with established compliance schedules.

(2) Time extensions. Agencies may submit requests for time extensions from established compliance schedule deadlines if necessary technology or alternatives are not available to permit full implementation of control strategies or emission sources will be unable to comply with pollution control requirements. Such requests must be submitted to the appropriate State air quality control agency for review and subsequent action.

#### G ARS CLEAN AIR PROGRAM (Continued)

(3) Performance Standards. Contact the appropriate State air quality control agency for required performance standards for each existing facility where action is necessary to achieve compliance with applicable requirements.

## d New Facilities

(1) General. New facilities shall be planned, designed, and constructed so that they will not cause a violation of any control strategy or interfere with attainment or maintenance of a National standard whether directly through emissions from the facility or indirectly because of emissions resulting from mobile sources associated with it.

(2) Performance Standards. Where action is necessary to comply with SIP's and applicable air quality standards, the appropriate air quality control office should be contacted at the earliest possible stage of planning with regard to formulation of performance requirements.

## 9 Reporting

### a Legal and Regulatory Reports

Locations shall comply with all air pollution reporting requirements in accordance with applicable Federal and State regulations.

## 10 Technical Assistance

Techniques and methods for the protection, enhancement, and attainment of air quality standards are published in 40 CFR Parts 1-99. Assistance and technical publications may be obtained from the EPA through Regional Office Federal Facility Coordinators and from State and local air pollution control agencies.

## 11 Operator Training

Many States have mandatory certification or licensing programs for the operators of sources permitted under the CAA. Where this is the case, operators of Federal facilities must be State certified or licensed. Other States have voluntary

certification requirements. In these instances,

### G ARS CLEAN AIR PROGRAM (Continued)

Federal facility operators should receive the training necessary to meet the levels of proficiency consistent with the requirements of the State in which the facility is located. Agencies should encourage all operators to become State certified even in those States where certification is voluntary.

### H HAZARDOUS WASTE DETERMINATION

In order to determine which rules and regulations apply to the wastes generated at a facility, a determination must be made as to whether or not the waste is hazardous. This is done by identifying and evaluating the physical and health hazard of the waste using knowledge of the substance or



## H HAZARDOUS WASTE DETERMINATION (Continued)

Further, many States and localities have established hazardous waste regulations with provisions that are more stringent and/or more consistent with the RCRA statutory definitions than the Federal RCRA regulations. Federal executive order and law, including the recently enacted Federal Facility Compliance Act, require Federal agencies to comply with the substantive and procedural State and local environmental requirements to the same degree and in the same manner as non-Federal entities. It is critically important to identify any differences among the Federal, State, and local regulations and to comply, at a minimum, with the most stringent of their regulatory provisions.

### 2 Question 1, Is the material a solid waste?

A material cannot be a hazardous waste under RCRA unless it is also a solid waste under RCRA. Accordingly, the first step in determining whether a material is a hazardous waste is determining whether it is a solid waste.

The term solid waste, as defined in 40 Code of Federal Regulations, Part 261, Section 261.2 (40 CFR 261.2), can be summarized as any solid, semi-solid, liquid, sludge, or contained gas that one wishes to get rid of; that has served its useful purpose; that is spent; that no longer serves its intended use; that is inherently waste-like; and/or that is, or is to be, abandoned, recycled, and/or used in a manner constituting disposal. Something is abandoned if it is disposed, burned, or incinerated; or is accumulated, stored, or treated before, or in lieu of being abandoned. Something is recycled if it is accumulated, stored, or treated before being recycled; is used in a manner constituting disposal; is burned for energy recovery; is reclaimed; or is accumulated speculatively. A solid waste is used in a manner constituting disposal if it is applied to or placed on the land directly or as part of a product.

If the answer to Question 1 is "yes", the waste material is a solid waste. Proceed to Question 2. If the answer is "no", management and/or disposal of the waste may be regulated under other authorities, including the Clean Air Act, Clean Water Act, or Subtitle D of RCRA.

## H HAZARDOUS WASTE DETERMINATION (Continued)

### 3 Question 2, Is the solid waste excluded from the definition of solid waste?

A material may satisfy the criteria for being classified as a solid waste but be excluded by law or regulation. If it is excluded from being a solid waste, it cannot be a hazardous waste under the federal RCRA regulations. However, it may nevertheless be a hazardous waste under a State or local hazardous waste program (e.g., polychlorinated biphenyls, used motor oil, etc.), or it may be hazardous in the larger sense of the term. As with waste or other materials that are not solid waste, other laws and regulations may apply to excluded wastes.

The exclusions of waste materials in 40 CFR 261.2 and 40 CFR 261.4 that are most likely to be relevant to ARS are:

a Domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a Publicly Owned Treatment Works or POTW (i.e., municipal wastewater treatment plant).

[Note: A wastewater treatment unit owned and/or operated by a Federal agency is not included in the definition of POTW in the Clean Water Act. Further, the determination of whether a waste is a solid waste and/or hazardous waste is required at the time the material becomes waste. Although discharging, pouring, spilling, dumping, or otherwise disposing of hazardous waste into a wastewater system may, under certain circumstances, be an appropriate treatment/disposal method, this practice must not be used to evade or avoid RCRA or other hazardous waste requirements. These requirements include notifying regulatory agencies of hazardous waste activity, keeping "cradle-to-grave" records of hazardous waste management, managing hazardous wastes properly while they are onsite, and ensuring that they are treated, stored, or disposed in accordance with all applicable requirements.]

b Irrigation return flows. [Note: As above, this exemption may not be used to avoid regulation under RCRA or other applicable requirements.]

#### H HAZARDOUS WASTE DETERMINATION (Continued)

c Nuclear materials or by-products as defined by the Atomic Energy Act. [Note: Individual States or localities may regulate these materials as hazardous wastes. Also, this exemption was virtually completely eliminated by the Federal Facilities Compliance Act of 1992.]

In each case, the materials that are excluded from the definition are regulated under other authorities.

If the answer to Question 2 is "no", proceed to Question 3. If the answer is "yes", comply with any other applicable requirements.

4 Question 3, Is the non-excluded solid waste, or a constituent of it, a listed hazardous waste?

A non-excluded solid waste is a Federally-listed, RCRA hazardous waste if it is named on one of the following lists:

a Commercial chemical products. These lists are found at 40 CFR 261.33(e) and (f). The chemicals on this list are designated the "P" and "U" wastes because they are identified by a 4-character alphanumeric string with the format "Pnnn" or "Unnn", where "n" is an arabic numeral. Additional chemicals may appear on State lists of hazardous wastes.

b Specific source wastes. This list is found at 40 CFR 261.32. The wastes on this list are designated the "K" wastes because they are identified by a 4-character alphanumeric string with the format "Knnn", where "n" is an arabic numeral. These wastes generally result from industrial processes and so will seldom, if ever, be encountered at ARS Locations.

c Non-specific source wastes. This list is found at 40 CFR 261.31. The wastes on this list are designated the "F" wastes because they are identified by a 4-character alphanumeric string with the format "Fnnn", where "n" is an arabic numeral. These wastes include spent halogenated and non-halogenated solvents and other wastes from general operations. Additional waste materials may appear on equivalent State lists.

## H HAZARDOUS WASTE DETERMINATION (Continued)

Remember, if a material is useful for its intended purpose, it is not a waste. So, useful chemicals in active inventory are not wastes and cannot be hazardous wastes. See Question 1.

A strict (nonconservative) interpretation of the RCRA regulations is that only unused commercial chemical products in which the sole active ingredient appears on the "P" or "U" list can be a "P" or "U" hazardous waste. Under this interpretation, only off-specification and/or expired commercially-obtained chemicals could be "P" or "U" hazardous wastes. For example, a 1 molar solution of potassium cyanide to be discarded would not be considered a hazardous waste under this interpretation. Similarly, only solvents used for their solvent properties (degreasers, diluents, extractants, reaction/synthesis media, etc.) could become "F" wastes. These interpretations must be checked closely against State and local regulations.

Mixtures of hazardous waste and solid waste, in any proportion, are RCRA hazardous waste in most cases, although their regulatory status at this point is much in question, following an adverse court ruling. The mixture rule brings wastes that do not meet the interpretations immediately above under the RCRA regulations. Because this is an extremely complicated, changing area of regulation with large liabilities associated with wrong decisions, a high level of caution is appropriate.

If a hazardous material that would be a hazardous waste is spilled by accident, it is not usually considered to have been discarded, and so the incident would not be considered to be disposal of hazardous waste. In this case, appropriate remedial action under the Comprehensive Environmental

Response, Compensation, and Liability Act (CERCLA), also known as Superfund, (or equivalent State programs) would be required. Generally, the waste and/or contaminated materials resulting from cleaning up the accidental spill would be considered to be hazardous waste.

On the other hand, if the material was a waste when it was spilled, the incident would have to be managed under RCRA and/or equivalent State requirements. Because soil and water are not considered solid wastes, once hazardous waste is

#### H HAZARDOUS WASTE DETERMINATION (Continued)

removed from them by treatment, "disposal" of the soil and water is not usually regulated under RCRA. One consequence of the "contained in" rule, which requires that materials that contain a listed hazardous waste be managed as a hazardous waste as long as it contains the listed waste.

A solid waste derived from the treatment, storage, or disposal of a listed hazardous waste is also considered hazardous, although this interpretation was overturned in court and re-promulgated as an interim rule. For example, if a hazardous waste is incinerated, the ash from the incinerator is regulated as hazardous waste.

Question 3 is the most difficult one to answer, because of inconsistency between the statutory and regulatory RCRA programs, changing regulations, differing interpretations in the various States, court action and decisions, the importance of a particular waste material's history in its regulatory classification, and the decentralized evolution of the RCRA program. A conservative approach to answering Question 3 is to use the statutory definition of hazardous waste found in Section 6903 of RCRA, namely:

"a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may -

(1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

One recommended source for the hazard and toxicity information to make this assessment is the Material Safety Data Sheet for the substance.

#### H HAZARDOUS WASTE DETERMINATION (Continued)

If the answer to Question 3 is "no", go to Question 5. If the answer to Question 3 is "yes", go to Question 4.

5 Question 4, Is the hazardous waste excluded from the lists of hazardous waste?

A waste or wastestream which might otherwise be a hazardous waste is not a hazardous waste if it is specifically excluded from regulation under one of the following categories potentially relevant to ARS in special cases:

a It is de-listed from the hazardous waste lists. See 40 CFR 260.

b It is household waste. See 40 CFR 261.4(b)(1). [Note: This exclusion applies only to households and/or to commercial products for household use available from retail stores. It only applies if these products are used in "household quantities".]

c Solid wastes generated by one of the following and returned to the soil as fertilizer (40 CFR 261.4(b)(2):

(1) growing and harvesting agricultural crops.

(2) raising of animals, including animal manures.

d It is a sample for analysis. See 40 CFR 261.4(d).

Other exclusions are unlikely to be applicable to ARS under reasonable circumstances. State and local exclusions and interpretations of these exclusions may be more restrictive.

If the answer to Question 4 is "no", the waste is hazardous waste and must be managed as one. If the answer to Question 4 is "yes", go to Question 5.

6 Question 5, Does the waste exhibit a characteristic of hazardous waste?

A solid waste that would not otherwise be a hazardous waste under the Federal RCRA regulations is a hazardous waste if it exhibits one or more of the following characteristics:

H HAZARDOUS WASTE DETERMINATION (Continued)

a Ignitability: flash point below 140F, ignitable compressed gas, etc. See 40 CFR 261.21.

b Corrosivity: pH less than 2 or greater than 12.5, corrodes steel, etc. See 40 CFR 261.22.

c Reactivity: explosive, generates toxic gases, reacts violently with water, etc. See 40 CFR 261.23.

d Toxicity Characteristic Leaching Procedure (TCLP) toxicity: capable of releasing certain toxic constituents by leaching. See 40 CFR 261.34. Currently 40 substances are TCLP toxics.

Altering the properties of the waste by, for example, dilution, chemical reaction, evaporation, incineration, or biodegradation is considered treatment under RCRA, an activity that may require a RCRA or other permit.

If one or more of the characteristics is exhibited, the answer to Question 5 is "yes", and the waste is hazardous. If the answer to Question 5 is "no", disposal of the waste may still be otherwise regulated.

Once a hazardous waste is identified, it must be managed in accordance with applicable Federal, State, and local requirements. These requirements include, but are not limited to, notification of hazardous waste activity, marking and labeling, security, training, and contingency planning. These topics are not covered in this section. Refer to specific directions found in 40 CFR Solid/Hazardous Wastes.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM

### 1 Purpose

To provide direction for implementing an ARS Solid and Hazardous Waste Management Program; to define actions to identify and evaluate facilities or activities at ARS facilities which may be in noncompliance with the Resource Conservation and Recovery Act (RCRA) and the Solid and Hazardous Waste Amendments of 1984; and to take corrective actions where necessary to achieve compliance with applicable regulations and standards.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### 2 Scope

The provisions of this section apply to all ARS facilities. To the extent provided by law and contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of pollution, key parts of which are outlined in this section.

### 3 Objectives

The primary objective of this program is to procure, use, and dispose materials in a manner that complies with all applicable regulations, minimizes waste production, conserves natural resources, and prevents adverse effects on health or the environment. Materials should be reused, recycled, or reprocessed to the maximum extent feasible, and pollution prevention measures should be utilized. (See Chapter DV.) Specific objectives include:

a Procurement of material to allow the end product or its components to be economically restored, reconstituted, or converted to other uses.

b Disposal of unserviceable or excess material through procedures that will enable these products to be recovered and reintroduced into the manufacturing process or reclaimed for other purposes. This would include use as an energy source or sale through property disposal channels.

c Recycling and reusing solid waste and hazardous substances to the greatest extent feasible; proper disposal of wastes that cannot be economically recovered in a manner that will prevent or minimize pollution of the environment.

#### 4 Policy

It is ARS policy to comply with all applicable regulations and standards regarding solid and hazardous waste management. This will include the following:

a Quantities of solid waste will be reduced at the source whenever possible.

b Solid waste will be recovered and recycled to the maximum extent feasible.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

c Use of joint or regional resource recovery facilities is encouraged.

d Contracts for waste disposal services will include provision for recycling, where markets exist.

e ARS facilities and activities will participate in recycling programs conducted by local communities to the extent practicable.

f Nonhazardous solid waste will be disposed in permitted sanitary landfills or through treatment by incineration in permitted facilities.

g ARS owned or controlled facilities and property will not be used to dispose of toxic, hazardous, radioactive, or medical wastes that were generated at facilities other than those owned or controlled by ARS.

h In the absence of published standards, or for information on those standards, guidance on acceptable methods and maximum concentrations and quantities of hazardous substances to be discharged or disposed of should be obtained from proper authorities.

## 5 Definitions

Refer to the statutes or 40 CFR 260-280 for the definition of specific terms not included in the glossary in Chapter DI of this manual.

## 6 Responsibilities

a Area Directors, will:

(1) Ensure compliance with all applicable regulations and standards regarding hazardous and solid waste management.

(2) Establish waste management programs, as necessary, to achieve hazardous and solid wastes controls, abatement, corrective action, and documentation.

(3) Develop procedures to assess and monitor facility waste management activities to determine compliance.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(4) Ensure that sufficient funds to achieve compliance are requested in the agency budget.

#### 7 Summary of the Resource Conservation and Recovery Act (RCRA) and Hazardous and Solid Waste Amendments of 1984 (HSWA)

##### a General

The basic purpose of RCRA and HSWA is to provide for the development of management plans,

standards, facilities, and procedures for the recovery of energy and other resources from discarded materials; to provide for the safe disposal of discarded materials; and to regulate the management of hazardous wastes. It is ARS policy to, wherever and whenever feasible, reduce or eliminate the generation of hazardous waste. Waste generated in spite of these pollution prevention measures should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

The RCRA and HSWA statutes recognize that regulation of the designation, management, collection, storage, treatment, and disposal of solid and hazardous wastes, as well as the generators, transporters, stors, treaters, and disposers of hazardous waste, is primarily the responsibility of State and local governments. Accordingly, EPA established minimum standards and authorizes State solid and hazardous waste standards that are at least as stringent as the minimum Federal RCRA program, provided they have adequate enforcement provisions.

EPA provides assistance to these entities in their development of standards and requirements for solid and hazardous waste management and control. Existing Regional, State and local laws and regulations establish requirements for waste management with which Federal facilities must comply as directed herein. The applicability of State and local hazardous waste requirements was clarified by the Federal Facility Compliance Act of 1992.

The EPA's regulations and standards are organized as follows:

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(1) Subtitle C - Hazardous Waste Management

(a) Identification and listing of hazardous waste (40 CFR 260 and 40 CFR 261).

(b) Standards applicable to generators of hazardous waste (40 CFR 262).

(c) Standards applicable to transporters of hazardous waste (40 CFR 263).

(d) Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR 264-268).

(e) Hazardous waste permit program (40 CFR 270-271).

(f) Inventory of Federal agency hazardous waste facilities/sites (Superfund Amendments and Reauthorization Act (SARA) docket).

(2) Subtitle D - Solid Waste Management

(a) Guidelines for the land disposal of solid wastes (40 CFR 257-258).

(b) Guidelines for the storage and collection of residential, commercial, and institutional solid waste.

(c) Solid waste management guidelines for beverage containers.

(d) Promulgation of resource recovery facilities guidelines.

(e) Source separation for materials recovery guidelines.

(f) Criteria for classification of solid waste disposal facilities and practices.

(3) Subtitle I - Regulation of Underground Storage Tanks (40 CFR 280)

(a) Notification.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(b) Release detection, prevention, and correction.

(c) Inspections, monitoring, and testing.

### b Hazardous Waste Management - Subtitle C

National standards and requirements have been promulgated for proper management of hazardous wastes. Applicable standards are summarized below.

#### (1) Identification and listing of hazardous waste (40 CFR 261)

This part identifies those solid wastes which are subject to regulation as hazardous wastes under other parts of RCRA regulations and which are subject to the notification requirements of Section 3010 of RCRA. It includes the definitions of "Solid Waste" and "Hazardous Waste" and wastes which are currently excluded from regulation. The exclusions include materials which are not solid wastes and solid wastes which are not hazardous wastes. Items of particular importance to ARS facilities in the second category include:

(a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered or reused. Household waste means any waste material (including garbage, ash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreational areas).

(b) Solid wastes generated by any of the following and which are returned to the soils as fertilizers.

1) The growing and harvesting of agricultural crops.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

2) The raising of animals, including animal manures.

3) Mining overburden returned to the mine site.

Many wastes that are hazardous to health or the environment are not found in lists or characteristic descriptions. Reference should be made to statutory definitions, especially in the case of hazardous waste, to determine whether a substance should--notwithstanding its regulatory classification--be handled as a hazardous material and/or waste. Although excluded from regulation, substances that are hazardous but not hazardous waste should not be disposed by Locations, as solid waste in routine trash collection operations inasmuch as ARS may incur liability for cleaning up environmental contamination resulting from such disposal.

Part 261 also includes special requirements for hazardous waste generated by small quantity generators, requirements for recycling materials and requirements for residues of hazardous waste in empty containers.

### (3) Small Quantity Generators (SQG)

The current definition of a conditionally exempt small quantity generator (CESQG) is a facility which generates less than 100 kilograms of hazardous waste in a month, or less than 1 kilogram of acutely hazardous waste in the same time period.

CESQG's are conditionally exempted from most of the requirements concerning storage, transport and disposal of hazardous waste under Subtitle C so long as they do not exceed the listed generation thresholds and they meet specified minimum standards.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

In order to be excluded from full regulation the CESQG must:

- (a) Not generate more than 100 kg of non-acutely hazardous waste in a month.
  
- (b) Not generate more than 1 kg of acutely hazardous waste in a month.
  
- (c) Not generate more than 100 kg of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill in a month.
  
- (d) Comply with the requirements for determination of hazardous waste.
  
- (e) Store/accumulate the hazardous waste in accordance with established requirements.
  
- (f) Meet certain other requirements for accumulation of hazardous waste, training, contingency planning, etc.

(g) Either treat or dispose of the hazardous waste on-site (in a permitted/approved solid or hazardous waste treatment unit) or ensure it is delivered to an approved/permitted off-site storage, treatment, or disposal facility.

SQG's generate between 100 kg/mo and 1000 kg/mo of hazardous waste, and less than 1 kg/mo of acutely hazardous waste. They also are subject to reduced standards compared to generators.

Any hazardous waste generator may accumulate hazardous wastes on-site for up to 90 days without a permit, provided the waste is properly stored and labeled. SQG's and CESQG's may accumulate/store hazardous waste up to 180 or 270 days, subject to certain conditions. If the amount of accumulated waste, or the volume accumulated, exceeds the limits for that class of generator, more stringent requirements will apply, namely a RCRA TSD permit must be obtained.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### (4) Requirements for Recyclable Materials

40 CFR Section 261.6 presents the special requirements for hazardous waste which is used, re-used, recycled or reclaimed.

## (5) Requirements for Residues of Hazardous Wastes in Containers

Any hazardous waste remaining in either:

(a) As the terms are defined in the regulations, an empty container and/or inner liner removed from an empty container is not subject to the Subtitle C requirements. A container or inner liner from a container that has held any non-acutely hazardous waste is considered empty if:

1) All wastes have been removed that can be removed using practices commonly employed for the material, that is, pouring, pumping, and aspirating.

2) No more than 2.5 centimeters of residue remain on the bottom of the container or liner.

3) No more than 3 percent by weight of the total capacity of the container remains if the container is less than or equal to 110 gallons or no more than 0.3 percent by weight of the total capacity remains if the container is larger than 110 gallons.

Caution should be exercised in disposing of "empty" containers that are not free of all hazardous contents. Very small amounts of some compounds can seriously contaminate the environment or present a health threat to exposed individuals.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(b) Containers or liners that have held acutely hazardous wastes are subject to additional requirements which include among others, triple-rinsing, before the container is considered empty.

See 40 CFR Part 261 for additional details for all of these areas.

40 CFR 261 includes the minimum criteria EPA and others use to designate hazardous waste under the Federal RCRA program. If a waste exhibits one or more "characteristics" of hazardous waste, it is hazardous waste. These characteristics are ignitability, corrosivity, reactivity, and toxicity.

This part also contains lists of hazardous wastes as follows:

(a) Hazardous waste from non-specific sources.

(b) Hazardous waste from specific sources.

(c) Discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.

The EPA has listed these wastes based on one or more of the following hazard codes:

(a) Ignitable Waste I

(b) Corrosive Waste C

(c) Reactive Waste R

(d) EP Toxic Waste E

(e) Acute Hazardous Waste H

(f) Toxic Waste T

For additional details see 40 CFR Part 261.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### (6) Standards Applicable to Generators of Hazardous Waste (40 CFR 262)

This part contains standards for generators of hazardous wastes. It includes requirements for generators of hazardous waste, including SQG's and CESQG's, to obtain an EPA and/or State hazardous waste generator identification number. This identification number, which is obtained by filing EPA Form 8700-12, Notification of Hazardous Waste Activity, (Exhibit 3) is not a permit. It does not "authorize" or "permit" any activity, rather it simply informs EPA and States that someone wishes to carry out, or is performing, the reported activity at a given facility. Failure to provide the required notification can be a civil or criminal offense.

Transporters of hazardous waste must also have a hazardous waste identification number, and, in most circumstances, a RCRA permit is required in advance before a facility can treat, store, or dispose any hazardous waste.

Part 262 includes requirements for use of a uniform hazardous waste manifest for shipments of hazardous wastes. It also includes pre-transportation requirements for packaging, labeling, marking and placarding.

Repeating, anyone who generates, treats, stores, disposes, transports, or offers for transport, storage, treatment, or disposal, any hazardous waste, must obtain an EPA Hazardous Waste Identification Number. Facilities which provide onsite treatment, storage, or disposal of hazardous wastes or store hazardous wastes in quantities greater than, or for periods longer than, those allowed for their generator type must obtain a RCRA permit. The requirements imposed by regulation on treatment, storage, and disposal facilities are extensive and costly (in labor and money), so managing waste so as to require a RCRA permit is strongly discouraged within ARS.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

##### (7) Accumulation Time

A generator may accumulate hazardous wastes on-site for up to 90 days without being considered a generator or being required to obtain a permit, provided that:

- (a) The waste is placed in containers or tanks which meet certain specified criteria.

(b) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.

(c) While being accumulated on-site each container or tank is labeled or marked clearly with the words "hazardous waste".

(d) The generator complies with the requirements for owners and operators regarding preparedness and prevention, contingency plans, and emergency procedures and personnel training.

A generator that accumulates wastes for more than 90 days is considered an operator of a storage facility and is subject to additional requirements.

A generator may currently accumulate up to 55 gallons of hazardous waste or one quart of acutely hazardous waste at "satellite accumulation facilities" without a permit and without complying with the conditions above if:

(a) Proper use and management of containers is provided.

(b) Containers are marked as "hazardous waste" or with other words that identify the contents.

This applies to wastes in containers at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process

generating the waste. If a generator

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

accumulates a quantity of waste in excess of the amount listed above, the actions described in items a through d above must be completed within 3 days (72 hours). However, the satellite-accumulation and 72-hour rule do not apply in some States.

This part contains requirements for record keeping and reporting. Generators must submit a biennial report by March 1 of each even numbered year for any hazardous waste shipped off-site. An exception report must be submitted for any waste that does not reach its manifested destination. See 40 CFR Part 262 for additional details.

#### (8) Standards Applicable to Transporters of Hazardous Wastes (40 CFR 263)

This part establishes standards for transporters of hazardous wastes within the United States, if such shipment requires an EPA uniform hazardous waste manifest. ARS facilities should not, for the most part, be directly involved as transporters. Agencies should ensure that approved contract transporters are used for any shipments of hazardous waste. See 40 CFR Part 263 for details.

(9) Standards for Owners and Operators of Hazardous Wastes Treatment, Storage, and Disposal Facilities (40 CFR 264 and 265)

This part establishes minimum national standards which define the acceptable management of hazardous waste. These standards apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except for specific exemptions or special requirements for small quantity generators.

Parts 264 and 265 include requirements in the following areas:

(a) General facility standards.

(b) Preparedness and prevention.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(c) Contingency plans and emergency procedures.

(d) Manifest system, recordkeeping and reporting.

(e) Ground-water protection.

(f) Financial requirements.

(g) Use of and management of containers.

(h) Tanks.

(i) Waste piles.

(j) Land treatment.

(k) Landfills.

(l) Incinerators.

In general, ARS Locations should not be involved in the treatment of hazardous wastes. Requirements for Section 7b(9)(g) and (h) above may be applicable for temporary storage of wastes. Requirements for incinerators may also be applicable. See 40 CFR Parts 264 and 265 for details.

(10) EPA Hazardous Waste Permit Program (40 CFR 264-265 and 270-271)

This part establishes provisions for the hazardous waste permit program under Subtitle C. It covers basic EPA permitting requirements, including standard permit conditions, and requirements for applications, monitoring, and reporting. A permit is required for the treatment, storage, or disposal of any hazardous waste as identified or listed in 40 CFR 261. Hazardous waste management units must have permits during:

(a) Active life of the unit.

(b) Any post-closure period for any unit.

(c) Any compliance period, including any extensions.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

The RCRA permit application consists of two parts, Part A and Part B. Part A, provides for qualification for owners and operators of existing hazardous wastes management (HWM) facilities to obtain interim status. Part B of the Permit is to be submitted in narrative form and contains both general and technical requirements specific to the type of facility, such as incineration. This section also contains requirements for permit changes, permit duration and continuance of expiring permits and operation under interim status.

There are some specific exclusions from obtaining a RCRA permit which are important. A permit is not required for:

1) Generators who accumulate hazardous waste on-site for less than 90 days (as provided in 40 CFR 262.34).

2) Farmers who dispose of hazardous waste pesticides from their own use (as provided in 40 CFR 262.51).

3) Facilities solely for the treatment, storage or disposal of hazardous wastes excluded by 40 CFR Parts 261.4 or 261.5 (small quantity generator exemption).

Under Item "b" above, ARS facilities are not eligible for the farmer exemption for onsite disposal of waste pesticides.

See 40 CFR Parts 264, 270, and 271 for additional details on the permitting program.

(11) Hazardous Waste Site Inventory

Section 3012 of RCRA requires each State to complete an inventory of each site within the State at which hazardous waste has at any time been stored or disposed of. These inventories may or may not include Federal facilities.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(12) Inventory of Federal Agency Hazardous Waste Activities

Section 3016 of the RCRA amendments requires Federal agencies to complete an inventory of each site which the agency owns or operates or has owned or operated at which hazardous waste is stored, treated, or disposed of or was disposed at any time. The inventory and biennial updates must be submitted to EPA and to States having an authorized hazardous waste program every two years beginning January 31, 1986. The Act and subsequent regulations under 40 CFR Parts 260 through 280 describe the information required for individual sites.

c Solid Waste Management - Subtitle D, 40 CFR 240-260)

Minimum national standards and requirements have been promulgated for proper management of solid wastes. Applicable standards as summarized herein. It should be noted that disposal of hazardous wastes in a solid waste management unit is illegal and may make the facility subject to RCRA or CERCLA response and enforcement actions.

(1) Guidelines for the Land Disposal of Solid Wastes (40 CFR 257-258)

These parts provide guidelines for the land disposal of solid wastes. The guidelines do not apply to hazardous, agricultural, and mining wastes. The regulatory provisions delineate minimum levels of performance for any solid waste land disposal site operation. Recommended procedures are provided for preferred methods by which the objectives of the requirements can be achieved.

Recommended procedures are provided for:

(a) Site selection.

(b) Design.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(c) Operation.

1) Water quality.

2) Air quality.

3) Gas control.

4) Vector control.

5) Esthetics.

6) Cover material.

7) Compaction.

8) Safety.

9) Recordkeeping.

Compliance with these guidelines is mandatory for Federal agencies. This includes non-Federal generated solid waste if it is processed and disposed of on Federal land and/or by a Federally-owned facility.

In addition, where Federal agency-generated waste is managed off-site by non-Federal entities, every effort must be made to utilize facilities which are in compliance with the guidelines. See 40 CFR 241 for additional details.

## (2) Guidelines for the Storage and Collection of Residential, Commercial and Institutional Solid Waste

This section provides guidelines for the collection of residential, commercial, and institutional solid wastes and street wastes. It does not cover mining, agricultural, and industrial solid wastes, hazardous wastes, sludges, construction and demolition wastes, infectious or medical wastes, or classified wastes. The guidelines include requirements which delineate minimum levels of performance for solid waste collection operations. They also include recommended procedures which suggest actions or preferred methods for achieving the objectives of the

requirements. Compliance with the

### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

"requirement" sections of the guidelines is mandatory for Federal agencies. See 40 CFR 243.

## (3) Solid Waste Management Guidelines for Beverage Containers

The objective of these guidelines is to reduce solid waste and litter and to conserve energy and materials through the use of a return system for beverage containers. To accomplish the return of beverage containers, a deposit of at least five cents on each returnable beverage container is to be paid upon purchase by the consumer and refunded to the buyer when the empty container is returned to the

dealer. Federal facilities must charge refundable deposits on both refillable beverage containers and non refillable ones. On-premises sales are excluded from the requirement to sell only returnable containers provided that empty containers are returned to the distributor for refilling or recycling. The guidelines establish requirements that delineate minimum actions for Federal facility compliance. See 40 CFR 244 for details.

#### (4) Promulgation Resources Recovery Facilities Guidelines

These guidelines apply to ARS facilities that have jurisdiction over any real property or facility which involves the agency in residential, commercial or institutional solid wastes disposal activities either in-house or by contact. Federal land that is used solely for the disposal of non-federal solid wastes is not considered real property or a facility. The guidelines contain requirements which establish minimum actions for Federal agencies for planning and establishing resource recovery facilities. Compliance with the requirements is mandatory for Federal agencies. The guidelines also include recommended procedures which suggest actions or preferred methods by which the

objectives of the requirements can be achieved. Compliance with recommended

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

procedures is not mandatory. See 40 CFR 245 for details.

#### (5) Source Separation for Materials Recovery Guidelines

This section provides guidelines for the source separation of residential, commercial, and institutional solids. It does not include mining, agricultural, and industrial solid wastes, hazardous wastes, sludges,

construction and demolition wastes, infectious wastes and classified wastes. The guidelines include requirements which delineate minimum actions for Federal agencies for the recovery of resources from solid waste through source separation. They also include recommended procedures which provide preferred methods by which the objectives of the requirements can be achieved. Compliance with the requirements is mandatory for Federal agencies. Compliance with recommended procedures is not. See 40 CFR 247 for details.

(6) Criteria for Classification of Solid Waste Disposal Facilities and Practices

This section establishes criteria to be used in determining which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health or the environment. Facilities and practices which fail to meet the established criterion are considered to be "open dumps" which are expressly prohibited by the RCRA. Criteria have been established for the following:

(a) Flood plains.

(b) Endangered species.

(c) Surface water.

(d) Ground water.

(e) Disease vectors.

(f) Air.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(g) Safety.

These criteria apply to all solid waste disposal facilities and practices with the following exceptions:

1) Agricultural wastes, including manures and crop residues, returned to the soil as fertilizers or soil conditioners.

2) Overburden resulting from mining operations intended for return to the mine sites.

3) Land application of domestic sewage or treated domestic sewage. (The criteria does apply to disposal of domestic sewage sludges and septic tank pumpings.)

4) Solid or dissolved materials in irrigation return flows.

5) Industrial point source discharges.

See 40 CFR 257 for further details as necessary.

d Regulation of Underground Storage Tanks - Subtitle I (40 CFR 280)

(1) Notification

(a) On or before May 8, 1986, owners of underground storage tanks currently in use for the storage, use, or dispensing of "regulated substances" were required to make notification of the existence of regulated tanks to designated State or local agencies. Owners are required to provide information about the age, size, type, location, and use of each tank.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

(b) By the same above date, owners of underground storage tanks taken out of operations after January 1, 1974, were required to provide notice of the existence of tanks abandoned in place to the same agencies. The following information was required:

1) Date tank was taken out of operation.

2) Age of the tank on the date taken out of operation.

3) Size, type, and location of the tank.

4) Type and quantity of substances left stored in a tank on the date taken out of operation.

(c) Owners who bring regulated underground storage tanks into use after May 8, 1986, must notify designated agencies within 30 days of bringing the tank into use. Information supplied must include age, size, location and use of tanks.

The EPA and/or state agencies have standard notification forms.

All of the notification requirements apply to Federal facilities. An installation is Federally owned if the owner is the Federal Government, even if it is operated by private contractor.

(d) There are a number of facilities that are excluded from the Federal definition of "underground storage tanks". Among others the following are exclusions:

1) Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes. However, ARS facilities are not considered farms, and this

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

exemption should not be claimed.

2) Tanks used for storing heating oil for consumptive use on the premises where stored.

3) Septic tanks.

4) Flowthrough process tanks.

5) Storage tanks situated in an underground area (such as a basement) if the tank is situated upon or above the surface of the floor.

(e) New Tank Performance Standards

Prior to EPA's final standards for new tanks, the following interim prohibition was in effect:

Between May 7, 1985, and the effective date of new standards, no person may install an underground storage tank for the purpose of storing regulated substances unless such tank:

1) Will prevent releases due to corrosion or structural failure for the operational life of the tank.

2) Is cathodically protected against corrosion, constructed of noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance.

3) The material used in the construction or lining of the tank is compatible with the substance to be stored.

#### I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

The new standards, which are minimum standards that can be made more stringent by States, appear at 40 CFR 280.

#### (2) Release Detection, Prevention and Correction

Section 9003(c) of the HSWA requires the EPA to develop regulations to include the following:

(a) Requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment.

(b) Requirements for maintaining records of any monitoring or leak detection system, inventory control system, or tank testing or comparable system.

(c) Requirements for reporting releases and correction action taken in response to a release from an underground storage tank.

(d) Requirements for taking corrective action in response to a release from an underground storage tank.

(e) Requirements for the closure of tanks to prevent future releases of regulated substances into the environment.

These requirements appear at 40 CFR 280.

### (3) Inspections, Monitoring and Testing

Section 9005(a) of the HSWA requires owners of tanks storing regulated substances to provide the EPA or State information regarding their tanks and associated equipment, tank contents and monitoring or testing records. This section also provides for authorized EPA or State representatives to inspect,

sample, monitor, or test underground

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

storage facilities and surrounding site conditions.

NOTE: Reference Chapter X ARS Storage Tank Management Program of Section C - ARS Industrial Hygiene Function for details.

### 8 Compliance with Standards

#### a General

Section 6001 of the RCRA requires Federal agencies to comply with all Federal, State and local requirements, both substantive and procedural to the same extent as any person.

#### b Hazardous Waste Management

Each ARS facility must establish a program to manage any hazardous wastes generated, or caused to

be generated by the activities of the facility. The primary goal of the program should be to eliminate or minimize to the maximum extent feasible the generation of hazardous wastes. As a minimum, the Location Hazardous Waste Management Program should include the following:

(1) Inventory and Control of Purchases

The initial and most effective method of managing waste is to take appropriate action before wastes are created. Each facility must maintain a current inventory of hazardous substances. This inventory will serve as the basis for control of the purchase of hazardous substances and should assist in reducing the volume entering the facility to the minimum necessary to carry out its mission. There is an existing requirement for hazard assessment in the workplace in DR 4400-2(5)(a)(2), Hazard Communication Programs, which states that "an inventory list of identified chemical and biological agents must be maintained and updated at least annually". Reference Chapter IV ARS Hazard Communication and Community Right-To-Know Programs of Section C - ARS Industrial Hygiene Function for details.

I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

The hazard assessment required by DR 4400-2 could be used as a basis for determining the hazard potential of facility wastes. The requirements of DR 4400-2 along with Section 6971 of RCRA should be reviewed to prevent duplicative efforts.

(2) Hazardous Substances Recovery

Used substances must be recovered, reused, or recycled whenever possible. This should include returning products to the manufacturer if feasible.

### (3) Hazardous Waste Determination

Each facility must evaluate its activities and processes to determine if the type of waste produced is hazardous. If so, the amount, storage and disposal practices must be evaluated to determine the classification of the facility as either a generator or small quantity generator.

### (4) Federal/State Notification

If the facility generates hazardous waste, the proper Federal and/or State hazardous waste control authority must be notified and proper registration/identification numbers obtained.

### (5) Recordkeeping/Reporting

Each facility classified as a hazardous waste generator must keep records as required by Federal and/or State regulations. This includes the uniform manifest that accompanies shipments to the disposal facility, and records of any tests, analyses, or determinations made in characterizing hazardous wastes.

These records must be maintained indefinitely, even though EPA's current records retention time is three years. The generator's liability does not end after three years. States may have more restrictive recordkeeping requirements. Biennial reports are required for generators who ship hazardous waste off-site, or who treat, store, or dispose of hazardous wastes on-site.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

Small quantity generators must maintain records to provide documentation that:

- (a) The facility's amount and storage of waste generated qualifies it as a small quantity generator.
  
- (b) The facility is disposing of its waste in an environmentally sound manner.

State reporting requirements vary. Each ARS facility must determine and comply with the reporting/recordkeeping requirements in the States where the waste is generated and/or disposed.

c Storage

Accumulated hazardous wastes must be kept in a secure storage area. The hazardous waste containers must be in good condition, dated when each period of accumulation began, and labeled as hazardous waste. The storage facility must provide the following:

(1) Protection from adverse weather.

(2) Secondary containment to catch leaks and spills.

(3) Fire protection.

(4) Segregation of incompatible wastes.

(5) Adequate ventilation.

The storage facility must be well maintained and inspected for leaks and deterioration of containers.

Each ARS facility must evaluate the amount of hazardous waste accumulation and time in storage to

ensure that Federal and State registration and permit requirements are met.

Special efforts should be made to maintain small quantity generator status and to limit storage to less than 90 days to avoid more stringent requirements.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### d Pre-transportation Requirements

Hazardous wastes are also regulated by the Department of Transportation (DOT) regulations. The DOT regulations include requirements for packaging, labeling, marking, and placarding for both EPA regulated and unregulated wastes. Each ARS facility that offers wastes for transport off-site must meet DOT standards.

An ARS facility that ships hazardous waste offsite must use a uniform hazardous waste manifest to accompany the shipment. The State where the waste is generated or disposed of can require the generator to use that State's version of the manifest. Each ARS facility generator must ensure that State and local government requirements are met. If the shipment does not reach a permitted TSD facility within 30 days, an exception report must be made to EPA and the State.

#### e Transporters

Each ARS facility must use a carrier to transport its hazardous wastes that meets all applicable Federal and State transporter requirements. Carriers must have transporter identification numbers and verifiable records of good operating practices.

#### f Designated Disposal Facility

The designated disposal facility must have an applicable RCRA permit and/or be approved by the State for disposal of hazardous wastes. A permitted land disposal site must be equipped with a liner and collection system which meets RCRA requirements.

#### g Hazardous Waste Disposal

Treatment, reuse, recycling or incineration are preferred over landfilling if any of these alternatives are feasible. The land bans and treatment standards for hazardous waste

prohibiting direct landfilling of hazardous wastes are mostly in place.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### h Solid Waste Management

#### (1) General

Installations and activities generating solid wastes shall meet all applicable requirements or standards issued by Federal, State and local agencies. These standards shall be applied in all solid waste collection and disposal operations and in resource recovery and recycling. In addition, the following waste management standards apply.

(a) Solid wastes that cannot be recovered or recycled will be disposed of in the most cost effective, environmental sound, manner.

(b) Solid wastes shall not be disposed of by open dumping.

(c) Alternative disposal techniques will be evaluated on a total life cycle cost basis. As a minimum the alternatives below will be considered.

1) Use of regional or municipal resource recovery facilities.

2) Contract collection and disposal.

3) Use of State approved disposal facilities.

4) Use of areawide transfer facilities.

5) On-site landfill disposal (if no other alternative is feasible).

(d) Open burning of certain materials is sometimes permitted in compliance with applicable regulations. In general, a highly conditioned permit

for open burning is required from a State or local air pollution agency.

## I ARS SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (Continued)

### (2) Procedures

Operation of solid waste collection and disposal systems will be in accordance with "Guidelines" and "Criteria" for collection and disposal, as outlined in 40 CFR 240-260. Operations will also comply with State and local requirements.

### (3) Beverage Containers

Federal facilities must establish a deposit-return system for all beverage containers, unless a non-implementation plan has been developed and approved.

### i Underground Storage Tanks

Federal agencies must comply with the notification, release detection, prevention, and correction requirements, and new tank performance standards for all applicable existing and new underground storage tanks. ARS Locations must also comply with applicable State standards which may be more stringent.

## 9 Reporting

### a Legal and Regulatory Reports

ARS facilities shall comply with all hazardous and solid waste management reporting requirements in accordance with applicable Federal and State regulations.

## 10 Technical Assistance

Criteria and procedures for the proper management of hazardous and solid wastes are published in 40 CFR Parts 240 through 399. Assistance and technical publications may be obtained from the EPA through their Regional Office Federal Facility Coordinators and from State waste management control agencies.

## J ARS SAFE DRINKING WATER PROGRAM

### 1 Purpose

To provide direction for implementing an ARS Safe Drinking Water program; to identify and evaluate facilities at ARS facilities which may not be in compliance with the Safe Drinking Water Act (SDWA); and to take corrective actions where necessary to

#### J ARS SAFE DRINKING WATER PROGRAM (Continued)

achieve facility compliance with the National Primary and Secondary Drinking Water regulations, underground injection control programs, and ground water policies and strategies.

#### 2 Scope

The provisions of this section apply to all ARS facilities. To the extent provided by law or contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of pollution which are outlined in this section.

#### 3 Objectives

The primary objective is to provide safe drinking water for the public and all ARS personnel through compliance with all standards established by the EPA and all applicable State and local agencies.

#### 4 Policy

It is ARS policy to adopt all measures consistent with applicable laws, regulations and orders to provide safe and protected drinking water for both the public and agency personnel. Where facilities are not in compliance, corrective measures shall be applied, including technical solutions and management actions which may result in making drinking water unavailable for human consumption.

#### 5 Definitions

Refer to the statute or Code of Federal Regulations for definitions of specific terms.

#### 6 Responsibilities

a Area Directors will:

(1) Program and budget for funding and personnel resources to allow Area facilities to continuously provide drinking water that meets the quality

requirements established by Federal, State and local regulations.

(2) Establish and maintain monitoring programs to assure drinking water systems comply with established criteria in accordance with applicable timeframes.

#### J ARS SAFE DRINKING WATER PROGRAM (Continued)

(3) Conduct field monitoring of Area Location's potable water facilities and recommend corrective actions when necessary.

(4) Cooperate with other Federal, State and local agencies in the evaluation of potable water supply needs.

### 7 Safe Drinking Water Act

#### a General

The basic purpose of the SDWA is to assure that purveyors and suppliers provide safe drinking water. The Act provides for development of regulations which contain criteria, standards, procedures, and requirements for a minimum quality of water which is supplied for public consumption. The Act also

provides for States to assume the primary enforcement responsibility for public water systems if they have an EPA approved program. When States have assumed primacy, they have the lead in implementing the SDWA requirements.

#### b Drinking Water Standards

National standards and requirements have been promulgated regarding the provision of safe drinking water, including protection of underground aquifers. Applicable regulations are summarized herein.

These regulations apply to all public water systems, except when the following describe the system:

(1) Consists only of distribution and storage facilities.

(2) Obtains all of its water from, but is not owned or operated by, a public water system to which these regulations apply.

(3) Does not sell water to any person.

(4) Is not a carrier which conveys passengers in interstate commerce.

All of the above conditions must be met for a system to be exempt.

#### J ARS SAFE DRINKING WATER PROGRAM (Continued)

##### c National Primary Drinking Water Regulations

These regulations define specific contaminants which in the judgment of EPA may have an adverse effect on public health. The regulations establish maximum contaminant levels (MCL's) for certain contaminants and/or treatment techniques for those contaminants for which MCL's have not been determined.

(1) Maximum Contaminant Levels. MCL's have been established for the following:

(a) Inorganic chemicals

(b) Organic chemicals

(c) Turbidity

(d) Microbiological (Coliform Bacteria)

(e) Radionuclides

(2) Treatment Techniques. Treatment techniques have been established for the following:

(a) Giardia Lambila

(b) Legionella

(c) Heterotrophic Bacteria

(d) Viruses

(3) Other Requirements. Requirements have also been established for:

(a) Monitoring (including sampling, analytical testing, and frequency)

(b) Reporting

(c) Public notification

(d) Recordkeeping

See 40 CFR Part 141 for details. State or local regulations may be more restrictive, in which case the more stringent requirements will apply.

## J ARS SAFE DRINKING WATER PROGRAM (Continued)

### d National Secondary Drinking Water Regulations

These regulations control contaminants in drinking water that primarily affect the esthetic qualities relating to the public acceptance of the water. This would include such contaminants as taste and odor. Significant concentrations of these contaminants may present health implications as well as esthetic degradation. These regulations are not Federally enforceable, but are intended as guidelines for States.

Secondary maximum contaminant levels (SMCL) have been established for a number of contaminants. See 40 CFR Part 143.

These levels represent reasonable goals for drinking water quality. The States may establish higher or lower levels which may be appropriate dependent on local conditions, provided that public health and welfare are not adversely affected.

The regulations also establish monitoring and analyses requirements.

### e Underground Injection Control (UIC)

These regulations establish minimum requirements for UIC programs which are administered either by States or the EPA. These requirements are divided into several subparts as follows:

(1) General elements of UIC programs, including definitions and classifications.

Injection wells have been classified in 5 categories, see 40 CFR Part 144.6 for descriptions and definitions.

(2) The following wells are included among those types of injection activities that are covered by the regulations.

(a) Any injection well located on a drilling platform inside a State's territorial waters.

(b) Any dug hole or well that is deeper than its largest surface dimension, where the principal function of the hole is emplacement of fluids.

J ARS SAFE DRINKING WATER PROGRAM (Continued)

(c) Any septic tank or cesspool used to dispose of fluids containing hazardous waste.

(d) Any septic tank, cesspool, or other well used by a multiple dwelling, community, or regional system for the injection of wastes.

(3) The following wells are excluded from these regulations:

(a) Injection wells located on a drilling platform or other site that is beyond a State's territorial waters.

(b) Individual or single family residential waste disposal systems such as domestic cesspools or septic systems.

(c) Non-residential cesspools, septic systems, or similar waste disposal systems if such systems:

1) Are used solely for the disposal of sanitary waste.

2) Have the capacity to serve less than 20 persons a day.

(d) Wells used for injection of hydrocarbons which are of pipeline quality and are gases at standard temperature and pressure for the purpose of storage.

(e) Any dug hole which is not used for emplacement of fluids underground.

(4) Performance standards applicable to all injection activities, basic elements of UIC programs and provisions for waiving permit of rule requirements.

Any underground injection is prohibited except as authorized by permit or rule issued under the UIC program. Construction of any well required to have a permit is prohibited until the permit has been issued.

J ARS SAFE DRINKING WATER PROGRAM (Continued)

In addition the following are prohibited:

(a) The construction of any Class IV well.

(b) The operation or maintenance of any Class IV well not in operation prior to July 18, 1980.

(c) The operation or maintenance of any Class IV well that was in operation prior to July 18, 1980, six months following the effective date of a UIC program approved or promulgated for a State.

(d) Any increase in the amount of hazardous waste or change in the type of hazardous waste injected in to a Class IV well.

There are some exemptions and additional restrictions that may apply to these prohibitions. See 40 CFR 144.13.

(5) Requirements for wells authorized by rule.

Injection into existing Class I, II (except existing enhanced recovery and hydrocarbon storage), and Class III wells is authorized by rule. This authorization expires:

(a) Upon the effective date of a permit or permit denial, if a permit application has been filed in a timely manner.

(b) If a permit has not been filed in a timely manner:

1) For Class I and III wells

a) Five years after approval or promulgation of a State UIC program unless a complete application is pending.

J ARS SAFE DRINKING WATER PROGRAM (Continued)

b) One year after promulgation of an EPA administered UIC program unless a complete application is pending.

2) For Class II wells (except enhanced recovery and hydrocarbon storage).

a) Five years after approval or promulgation of a UIC program unless a complete application is pending.

3) For Class II enhanced recovery and hydrocarbon storage wells.

a) For the life of the well or project subject to compliance with certain requirements.

4) Class V Wells

a) Injection into Class V wells is authorized until future regulations become applicable.

Additional requirements for these wells authorized by rule are detailed in 40 CFR Parts 144.25 through 144.28.

(6) Authorized by Permit

Except for wells authorized by rule, all underground injection wells must obtain a permit. Those wells authorized by rule must still apply for a permit unless authorization was for the life of the well or project. See 40 CFR Part 144, Subpart D for details.

#### (7) Permit Conditions

This section provides conditions that are applicable to all permits. It includes requirements for monitoring, reporting, recordkeeping, compliance schedules and construction and operation among other items. See 40 CFR Part 144 for details.

### J ARS SAFE DRINKING WATER PROGRAM (Continued)

#### (8) Technical Criteria and Standards

This section provides technical criteria and standards for the underground injection control program, and covers all five classes of injection wells. See 40 CFR Part 146. Individual State control programs are detailed in 40 CFR Part 147.

## 8 Compliance With Standards

### a General

Section 1447 of the SDWA requires ARS to comply both substantively and procedurally with the statute of the same extent as non-government entities.

### b Existing Facilities or Activities

#### (1) Public Water Systems

ARS must comply with the MCL's and/or treatment techniques that have been established for the various contaminants. This includes performing sampling and testing in accordance with established frequencies, conducting resamples when an initial sample analysis indicates an MCL has been exceeded and public notification to the user if systems fail to comply.

Noncompliance violations are subject to enforcement actions including civil penalties.

(2) Underground Injection Wells

ARS must comply with UIC programs and obtain UIC permits or meet the requirements of authorization by rule.

UIC permits certain legally enforceable permit conditions and compliance schedules. Compliance schedules require any necessary action as soon as possible, but in no case later than 3 years after the effective date of the permit.

J ARS SAFE DRINKING WATER PROGRAM (Continued)

All actions necessary to have existing ARS facilities or activities conform with applicable standards shall be in accordance with established requirements and permit compliance schedules.

c Variances

The NPDWR currently in effect allow for variances under certain specified conditions. These conditions are detailed in 40 CFR Part 142.43. However the EPA is currently in the process of revising the regulations. The proposed rule will not permit any variances.

#### d Exemptions

The NPDW regulations currently allow for exemptions under certain conditions which are specified in 40 CFR Part 142. The EPA proposed rule will continue to allow for some exemptions, but under more stringent requirements. The minimum requirements are contained in EPA's Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems.

#### e Performance Standards

Basic requirements are detailed in the Regulations. Contact the appropriate EPA Regional Office or State public health agency for required performance standards for individual existing systems or activities where action is needed to achieve compliance.

#### f New Facilities



ARS officials should encourage all operators to become State certified even in those States where certification is voluntary.

## 10 Monitoring

The minimum frequencies of routine and followup sampling, testing, and analyses for contaminants are specified in the regulations for public water systems and by rule or individual permits for underground injection wells. See 40 CFR Parts 141-147.

Test results of all control and contaminant testing will be recorded on applicable EPA, State, or agency forms. Forms will be maintained as a record to show compliance with regulations or standards.

When these results indicate noncompliance or inadequate performance, appropriate corrective action measures shall be taken.

## 11 Reporting

## a Legal and Regulatory Reports

(1) System/Project. For public water systems, monitoring information (test measurements or analysis) shall be reported to the State within the first 10 days of the month following the month in which the results are received or within 10 days

## J ARS SAFE DRINKING WATER PROGRAM (Continued)

following the end of a monitoring period, whichever of these is shortest.

Reports shall be made to the State within 48 hours if a system fails to comply with any Primary Drinking Water Regulation, including failure to meet monitoring requirements. See 40 CFR 141.31 for additional details.

(2) Underground Injection Wells. Monitoring information required by UIC permits will be summarized as prescribed in the permit and completed reports shall be submitted to the appropriate control agency.

## 12 Public Notification

Current requirements for public notification are outlined in 40 CFR Part 141.32. The EPA is revising some of these requirements. The proposed revisions are listed in Chapter 8 of the Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems.

## 13 Recordkeeping

a For public water systems ARS facilities shall retain the following records.

(1) Bacteriological analyses for a period not less than 5 years.

(2) Chemical analyses for not less than 10 years.

(3) Records of actions taken to correct violations for not less than 3 years.

(4) Copies of reports or communications relating to sanitary surveys for not less than 10 years.

(5) Exemptions granted shall be kept for a period ending not less than 5 years following the expiration of the grant.

## 14 Technical Assistance

Assistance and technical publications may be obtained from the EPA through their Regional Office Federal Facility Coordinators or from State or local agencies.

## K ARS CLEAN WATER ACT PROGRAM

### 1 Purpose

To provide direction for implementing an ARS water pollution abatement program; to identify and evaluate facilities at ARS facilities which may be in noncompliance with the Clean Water Act (CWA), also known as the Federal Water Pollution Control Act (FWPCA); and to take corrective actions where necessary to achieve facility compliance with water quality standards, discharge permits, effluent limitations, implementation plans, and nonpoint source control strategy.

### 2 Scope

The provisions of this section apply to all ARS facilities. To the extent provided by law or contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of pollution, which are outlined in this section.

### 3 Objectives

The ARS water resources management goal is to conserve water resources and protect them from contamination. To achieve this goal ARS will:

a Control and abate all sources of pollutants according to applicable Federal, State and local requirements.

b Contribute to the attainment of the National goal to eliminate the discharge of pollutants.

#### 4 Policy

It is ARS policy to adopt all measures consistent with applicable laws, regulations, and orders to prevent or control the discharge of pollutants into ground or surface waters. ARS wastewater treatment facilities and nonpoint source activities will be

managed: to avoid creating health hazards and nuisance conditions; to restore or maintain the quality of characteristics of water resources; and to prevent future pollution or degradation of surface or ground waters. Where facilities or activities are not in compliance corrective actions shall be applied, including technical solutions and management actions which provide for restricted use, temporary closure or permanent closure.

## K ARS CLEAN WATER ACT PROGRAM (Continued)

### 5 Definitions

Refer to the statute or Code of Federal Regulations for definitions of specific terms.

### 6 Responsibilities

a Area Directors will:

(1) Program and budget funding and personnel resources for all water pollution control projects required to assure timely compliance with all applicable standards.

(2) Identify and quantify all sources of water pollution; determine proper actions on a program level to eliminate or reduce pollution to acceptable levels.

(3) Provide technical assistance to field installations on wastewater treatment programs and activities.

(4) Monitor field installations to determine effectiveness of water pollution abatement and control programs; recommend corrective measures when necessary.

## 7 Summary of the Federal Water Pollution Control Act/Clean Water Act

### a General

The basic purpose of the FWPCA/CWA is to restore and maintain the chemical, physical and biological integrity of the Nation's waters. The Act establishes goals for the eventual elimination of discharge of pollutants into receiving waters; a prohibition of discharge of toxic pollutants in toxic amounts; areawide waste treatment management planning to assure adequate controls of sources of pollutants; and

State's responsibilities to plan the development and use of land and water resources to prevent, reduce and eliminate pollution. The Act also sets standards and minimum requirements for the control and abatement of water pollution. These requirements are primarily covered in the following sections:

(1) Section 208 - Development and Implementation of Areawide Waste Treatment Management Plans.

K ARS CLEAN WATER ACT PROGRAM (Continued)

(2) Section 301 - Effluent Limitations for Point Source Discharge.

(3) Section 302 - Water Quality Related Effluent Limitations.

(4) Section 303 - Water Quality Standards and Implementation Plans for States.

(5) Section 306 - National Standards of Performance.

(6) Section 307 - Toxic and Pretreatment Effluent Standards.

(7) Section 311 - Oil and Hazardous Substance Liability.

(8) Section 314 - Clean Lakes Program.

(9) Section 319 - Nonpoint Source Management Programs.

(10) Section 401 - Certification.

(11) Section 402 - National Pollutant Discharge Elimination System (NPDES).

(12) Section 403 - Ocean Discharge Criteria.

(13) Section 404 - Permits for discharge of dredged or fill material into navigable waters at specified disposal sites.

#### b Pollution Abatement and Control Standards

National standards and requirements have been promulgated for prevention and control of water pollution from various sources, both point and nonpoint. Applicable regulations are summarized herein.

(1) Section 208 - States have the primary responsibility for the development and implementation of area-wide waste treatment management plans. These plans must include among many items the following:

(a) The identification of collection and treatment works necessary over a 20 year period to control point source discharges.

#### K ARS CLEAN WATER ACT PROGRAM (Continued)

(b) A process to identify, if appropriate, agriculturally and silviculturally related nonpoint sources of pollution, including return flows from irrigated agricultural lands and their cumulative effects, runoff from manure disposal areas, and from land used for livestock and crop production and to establish procedures and methods to control to the extent feasible such sources.

(c) A process to identify, if appropriate, mine-related sources of pollution including new, current, and abandoned surface and underground mine runoff and to establish procedures and methods to control to the extent feasible these sources.

(d) A process to identify construction activity related sources of pollution and to establish procedures and methods to control to the extent feasible these sources.

(e) A process to control the disposition of all residual waste generated in an area which could affect water quality.

(f) A process to control the disposal of pollutants on land or in subsurface excavations within an area to protect ground and surface water quality.

(2) Section 301 - Covers effluent limitations for point source discharges. 40 CFR Part 25 establishes criteria and standards for the imposition of technology-based treatment requirements in permits under this section. These requirements represent the minimum level of control in accordance with the following statutory deadlines:

(a) Publicly Owned Treatment Works (POTW's).