

World Resources Company
EPA ID No. AZD 980 735 500
Attachment 1
Final Permit

ATTACHMENT 1
FACILITY DESCRIPTION

1. FACILITY DESCRIPTION

A description of the World Resources Company (WRC) Facility, including location and process information and information on the manifest, record-keeping, and reporting systems is provided in this section.

1.1 General Description

A general description of the WRC Facility, as required by Code of Federal Regulations (CFR) Title 40, Section 270.14(b)(1), follows.

Company Name:	World Resources Company
Corporate Address:	1600 Anderson Road McLean, Virginia 22102-1696
Facility Address:	8113 West Sherman Street Tolleson, Arizona 85353-4025
Telephone Number:	(602) 233-9166
Facsimile Number:	(623) 936-9164
USEPA Identification Number:	AZD980735500
Facility Contact:	Mr. Raymond Corcoran, Vice President and General Manager

WRC operates a commercial business producing precious and non-ferrous metal concentrate products from select metal-bearing industrial waste streams. The metal concentrates are sold to major metal extraction businesses worldwide. During the production of the metal concentrates, WRC treats and stores recyclable materials on site in the hazardous waste management unit (HWMU), utilizing a thermal concentrating unit (TCU), a mechanical shredding/size reducer unit, a mechanical blender, and a hazardous debris treatment unit.

A site map showing the facility buildings and structures is included as Site Plan SP-S01.

1.2 Location Information

The WRC Facility is located on a 10.2-acre site at an approximate elevation of 1,117 feet above sea level. The facility land area is zoned General Industrial by the City of Tolleson. WRC also owns a 4.9 acre property across Sherman Street, which is shown on the Figure M-T01. This is shown as part of the facility, but is not part of the facility where hazardous wastes are managed.

The following are brief descriptions of these items.

Surrounding Land Use: Land uses in the immediate area of WRC are commercial and industrial.

Legal Boundaries: The facility boundary on which hazardous waste is managed is indicated on Figure M-T01. The legal boundaries of the facility are described as follows:

That part of the West half of the Southwest quarter of Section Eleven (11), Township One (1) North, Range One (1) East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, described as follows:

FROM the Southwest corner of the said West half of the Southwest quarter of Section 11, measure thence South 89 degrees 28 minutes 00 seconds East along the South line of the said West half of the Southwest quarter of Section 11 a distance of 683.82 feet; thence North 00 degrees 11 minutes 08 seconds West 465.00 feet to the point of beginning; thence continuing North 00 degrees 11 minutes 08 seconds West 883.67 feet to a point on the South line of the parcel described in Docket 6199, page 694, Maricopa County Records, said point bearing South 89 degrees 28 minutes 00 seconds East 682.93 (682.38 record) feet from a point on the West line of the said West half of the Southwest quarter of Section 11; thence North 89 degrees 28 minutes 00 seconds East along the South line of the parcel described in Docket 6199, page 694, a distance of 333.83 feet to a point on the West line of the Easterly 300.00 feet of the said West half of the Southwest quarter of Section 11; thence South 00 degrees 16 minutes 32 seconds East parallel to and 300.00 feet Westerly from the said East line, a distance of 883.68 feet; thence North 89 degrees 28 minutes 00 seconds West parallel to the South line of the said West half of the Southwest quarter of Section 11, a distance of 335.22 feet to the point of beginning.

That part of the West half of the Southwest quarter of Section Eleven (11), Township One (1) North, Range One (1) East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, described as follows:

FROM the Southeast corner of said West half of the Southwest quarter of Section 11, measure thence North 00 degrees 16 minutes 32 seconds West along the East line of said West half of the Southwest quarter of Section 11, a distance of 852.69 feet to the point of beginning; thence continuing North 00 degrees 16 minutes 32 seconds West along said East line, a distance of 496.00 feet to a point on the South line of that roadway easement described in Docket 6199, page 694, Maricopa County Records; thence North 89 degrees 2 minutes 00 seconds West along said South line a distance of 300.00 feet; thence South 00 degrees 16 minutes 32 seconds East 496.00 feet; thence South 89 degrees 28 minutes 00 seconds East 300.00 feet to the point of beginning.

Legal Boundaries: The legal boundaries for the parcel across Sherman Street (see ACSM/ALTA Survey), without hazardous waste units, are described as follows:

The East 200 feet of the West half of the west half of Section Eleven (11), Township One (1) North, Range One (1) East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, lying South of the south right of way of the now Southern Pacific Railroad and lying North of the right of way line of Sherman Street, as described by instrument recorded in Docket 6199, page 694, Maricopa County Records:

FROM the West quarter corner of said Section 11, thence South 00 degrees 06 minutes 56 seconds East a distance of 282.87 feet to a point; thence North 87 degrees 39 minutes 06 seconds East along the South right of way line of the Southern Pacific Railroad, said line being 30.00 feet and Southerly of the centerline of existing rails a distance of 1112.24 feet to the true point of beginning; thence continuing North 87 degrees 39 minutes 06 seconds East a distance of 202.93 feet to the East line of said West half of the West half of Section 11; thence South 00 degrees 12 minutes 43 seconds East along said line a distance of 1073.51 feet to a point on the North line of Sherman Street as described in an instrument recorded in Docket 6199, page 694; thence North 89 degrees 26 minutes 13

seconds West a distance of 204.11 feet to a point on a line called the West line of the East 200.00 feet said West half of the West half of Section 11 by an instrument recorded in 93-0875850; thence along said line North 00 degrees 08 minutes 30 seconds West a distance of 1063.25 to the true point of beginning.

Access Control: The WRC Facility is surrounded by an access control and security fence, which is described in further detail in Part II, Section 7.1.2, Barrier and Means to Control Entry, of this application.

Injection and Withdrawal Wells: The site has no injection wells. Three active groundwater monitoring wells are located on the WRC property, and are discussed in greater detail in Part II, Section 9 of this application. Two off-site groundwater withdrawal wells are located within 1,000 feet of WRC. The Salt River Project (SRP) well located just west of the WRC property is active; pumping data for this well through January 2007 is provided in Part III, Appendix B. Another SRP well located northwest of the WRC property is inactive.

Buildings, Treatment and Storage Areas, and Related Structures: The facility consists of an administration/laboratory building located in the northeast corner of the property; an equipment maintenance building located in the northwest portion of the property; the locker room, lunchroom and manifest clerk's building located in the northwest portion of the property; the incoming materials checkpoint shed located in the north portion of the property; the HWMU located in the center of the property; the TCU, mechanical shredding/size reducer unit, and mechanical blender are located near the northwest corner of the HWMU; a locker station is located to the northwest of the HWMU; the wastewater treatment unit located in the southeast portion of the property; and vacant land in the southwest portion of the property. The HWMU occupies approximately 4 acres of land and is covered by a fabric solar canopy (referred to as the fabric mesh canopy) for wind reduction. The property across Sherman Street is vacant, and only a small portion is used for employee parking. Site Map M-T01 shows the facility structures in greater detail.

Flood Control/Drainage Barriers: The general topography at the facility is flat. Water drainage within the facility is influenced by the sloping of asphalt and concrete traffic control and parking areas. Run-on to and run-off from the HWMU area is prevented by concrete containment berms. The HWMU area is sloped gradually so that storm water and rinsate are contained in the southwest and southeast corners.

Operable Units: The HWMU, the TCU, the mechanical shredding/size reducer unit, and the mechanical blender are classified as Resource Conservation and Recovery Act (RCRA) miscellaneous units.

The following features are not located within 1,000 feet of the facility boundaries, and are thus not included on the topographic map: 100-year floodplain and surface waters. Information on floodplains is included in Section 2.2.3, below. Figure F-W01 shows the annual wind rose of meteorological data collected from 2004 through 2008 at Phoenix Sky Harbor International Airport. According to the data, prevailing wind directions and corresponding approximate percentages of total time are as follows:

- Out of the east-southeast, 14 percent;
- Out of the east, 11 percent;
- Out of the west, 10 percent;
- Out of the southeast, 8 percent; and
- Out of the west-southwest, 7 percent.

The balance of wind data for non-prevailing directions is provided in the updated wind rose (Figure F-W01). Winds are generally less than 5.7 miles per hour.

1.3 Chemical and Physical Analysis of Hazardous Waste

WRC processes recyclable wastewater treatment sludges and filter media produced primarily from electroplating and metal finishing operations to produce metal concentrate products. These products are sold to primary smelters and metal extraction and refining companies worldwide.

The following is a list of hazardous waste codes accepted by WRC and the basis for their hazardous designation.

Listed Hazardous Wastes

- | | |
|-------------|---|
| F006 | toxic (wastewater treatment sludges from electroplating operations) |
| F019 | toxic (wastewater treatment sludges from the chemical conversion coating of aluminum) |

Characteristic Hazardous Wastes

- | | | | |
|-------------|------------------|-------------|------------------|
| D004 | toxic (arsenic) | D008 | toxic (lead) |
| D005 | toxic (barium) | D009 | toxic (mercury) |
| D006 | toxic (cadmium) | D010 | toxic (selenium) |
| D007 | toxic (chromium) | D011 | toxic (silver) |

Non-RCRA Wastes

Non-RCRA wastes (e.g., buffing and polishing powders with copper, nickel, zinc, and/or precious metal content).

WRC is provided with analytical data or analyzes all incoming recyclable material by means of a representative sample provided by the generator before it is scheduled to arrive at the facility. A detailed explanation of the recyclable material sampling and screening procedures is contained in the WAP (Attachment 5). After the representative sample is approved, a trial or initial shipment of recyclable material is scheduled to be delivered to WRC. Guidelines for recyclable material constituent content are listed in Table 2-1.

Table 2-1. WRC Recyclable Material Constituent Content Guidelines
(Dry Basis)

Constituent	Normal Range of Concentrations	Constituent	Normal Range of Concentrations
Antimony	0 - 0.5%	Cyanide, Total	0 - 2.0%
Arsenic	0 - 1.0%	Chloride	0 - 20%
Barium	0 - 1.0%	Fluoride	0 - 20%
Beryllium	0 - 0.1%	Lead	0 - 30%
Bismuth	0 - 0.2%	Mercury	0 - 1.0%
Cadmium	0 - 20%	Nickel	0 - 35%
Chromium	0 - 30%	Selenium	0 - 0.5%
Chromium, Hexavalent	0 - 0.1%	Silver	0 - 5.0%
Copper	0 - 50%	Thallium	0 - 0.05%
Cyanide, Free	0	Zinc	0 - 30%
Free Liquids	not accepted	Radionuclides	zero
VOC	0 to 5 ppm	Ignitability	none
pH	>2.0 - <12.5	Reactivity	none

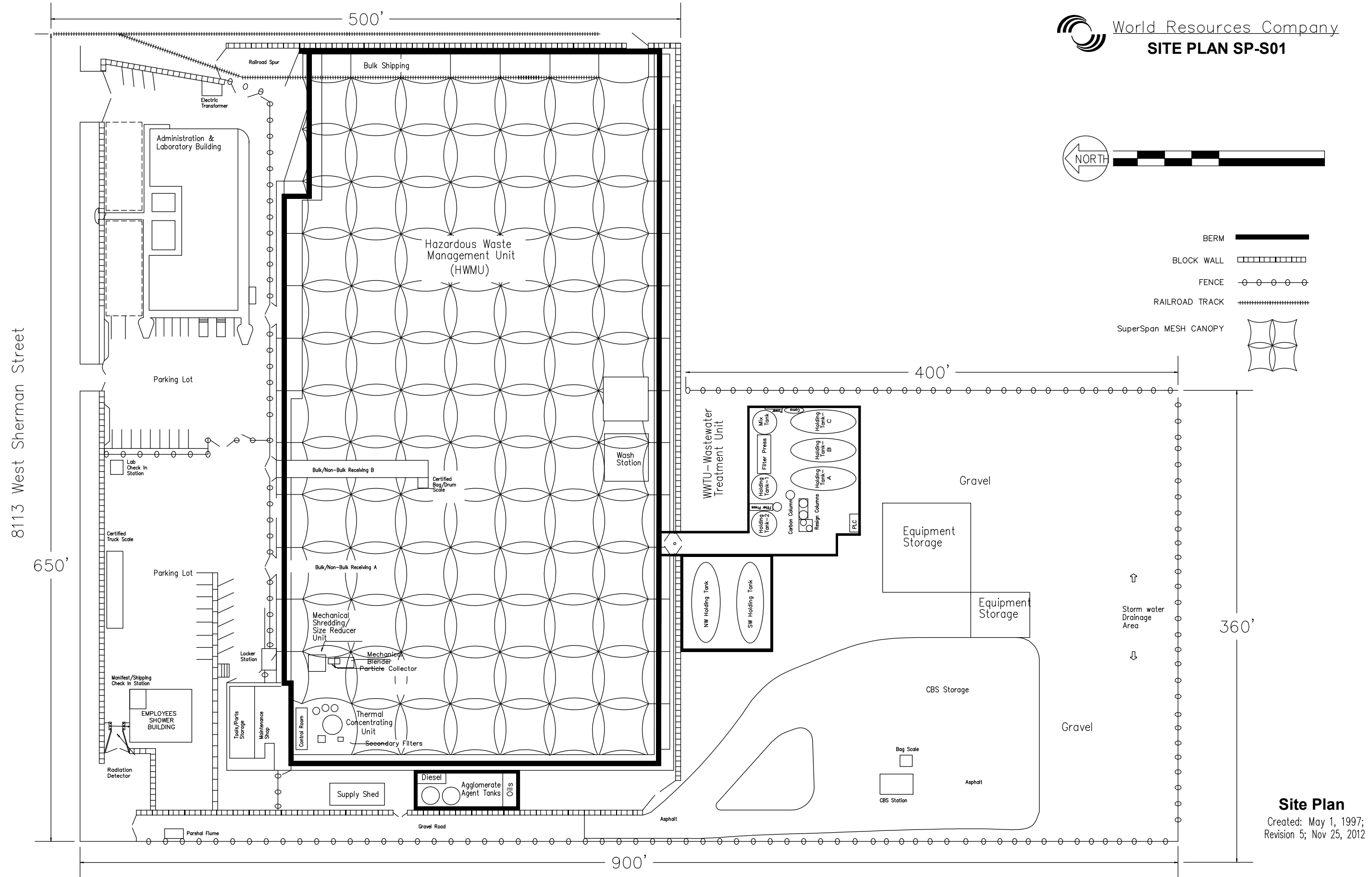
ppm = parts per million

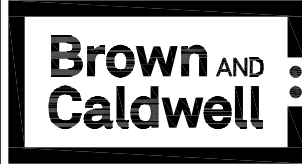
VOC = volatile organic compound

SITE PLANS

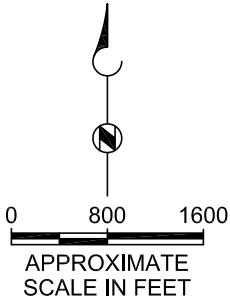
SP-SO1 Site Plan

SP-T01 Site Map with Well Locations





MAP SOURCE: USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLES - TOLLESON / FOWLER, ARIZ. (PHOTO REVISED 2011)



EXPLANATION

- APPROXIMATE SITE BOUNDARY
- CONTIGUOUS WORLD RESOURCES PROPERTY THAT IS NOT PART OF THE ACTIVE HWMU
- APPROXIMATE 1-MILE BOUNDARY SURROUNDING THE HWMU
- WELL LOCATION AND ADWR REGISTRATION NUMBER. WELL LOCATIONS ARE APPROXIMATE AND BASED ON CADASTRAL RECORDS.
- ELEVATION (FEET)

SITE MAP SP-T01
WORLD RESOURCES COMPANY
TOLLESON, ARIZONA