World Resources Company EPA ID No. AZD 980 735 500 Attachment 2 Draft Permit

# ATTACHMENT 2 VARIANCE REQUIREMENTS

#### 2. VARIANCE REQUIREMENTS

# 2.1 General Description

On August 13, 2002, the U.S. Environmental Protection Agency issued a Final Rule that granted to WRC a variance from classification as solid waste for the partially reclaimed metal-concentrate that WRC ships from its Tolleson, Arizona facility in conformity with the requirements specified therein. Under the variance, the WRC metal-concentrates that have been accepted and processed under its requirements and sold, as required, to a smelter become commodity-like upon completion of loading by WRC for shipment.

Recyclable materials that are reclaimed, and which are hazardous only because they exhibit a characteristic of hazardous waste (D004 or D010 for example), are excluded from classification as solid waste pursuant to 40 CFR 261.2(c)(3), and therefore are not hazardous wastes (a sub-class of solid waste). Such recyclable materials as well as non-waste materials are not subject to the requirements of the variance. These materials may be compounded together with the listed hazardous wastes F006 and/or F019 if these hazardous wastes are processed as required by the variance.

Specified variance requirements follow:

- 1. Each shipment from a generator of F006 and/or F019 metal-bearing sludge accepted for recycling must have a metal concentration of no less than 2 percent on a dry-weight basis of either Cu, Ni, or Sn, or, in the alternative, the sum of the economic value of the contained precious metals Au, Ag, Pt, and Pd must equal or exceed the minimum economic value of one of the base metals Cu, Ni, or Sn. The Waste Analysis Plan (WAP), in Section 5, describes the certificated methods used to determine whether or not an incoming lot of F006 or F019 meets the minimum metal-content requirement and, therefore, conforms to the variance.
- 2. WRC may not accept more than one non-conforming shipment from a generator, unless the second non-conforming shipment is received within 14 days of the first. Thereafter, WRC may not accept additional material from that generator until WRC determines that the generator's shipments will meet the minimum metal-content requirement. To achieve this objective, if a non-conforming load is received, WRC shall notify the generator, determine if there has been a change to the generator's processes, and provide notification that any future shipments cannot be accepted until WRC determines that the generator's next shipment will meet the minimum metal-content requirement. When the generator notifies WRC that it believes that its non-compliance has been resolved, WRC will analyze a new sample of the generator's sludge to verify compliance, before resuming shipments of the generator's waste.
- 3. WRC must place a provision in its contract with each smelting facility stipulating that no land placement of the metal-concentrate can occur.
- 4. The cyanide concentration of outgoing shipments must be no greater than 590 parts per million (ppm). The WAP describes the certified method for determining that the concentrate contains less than 590 ppm of cyanide.
- 5. WRC must send a one-time notification of the variance and its conditions to any foreign country wherein smelters that accept WRC's commodity-like metal-concentrate are located.
- 6. WRC must include on its Safety Data Sheet shipped with the commodity-like metal-concentrate a notification that the concentrate may contain up to 590 ppm cyanide and that low pH environments can result in the production of hydrogen cyanide gas.

7. An annual audit performed by an independent third party mutually acceptable to the Arizona Department of Environmental Quality (ADEQ) and WRC shall be completed and provided to ADEQ within the first six months following the end of each calendar year. The intent of the audit is to certify that all WRC commodity-like metal-concentrate shipments were made to contracting smelters, documented and shipped in accordance with all applicable U.S. Department of Transportation regulations, and documented to have reached the designated destination.

Information concerning both incoming loads and shipped metal-concentrate is maintained in WRC's data system, from which the following two reports are generated: (1) Variance Compliance Report and (2) Variance Material Shipment. The Variance Compliance Report provides a record of each incoming load's received date, shipment number, date of acceptability test completion, whether or not the load met the variance requirements, the variance qualifying reason, or if the incoming load failed the variance acceptance criteria the actions taken. If the received shipment was an EPA D waste or non-hazardous waste that fact will be indicated and the compliance testing and test results columns will contain no information.

The Variance Material Shipment report will provide the outgoing load ID, the date of shipment, and the cyanide content given in ppm.

Outbound shipments of metal-concentrate that do not meet one or more of the variance criteria must be accompanied by standard hazardous waste manifest documentation.

Samples of both reports, from which confidential information has been redacted, immediately follow.

## REPORT EXAMPLE

		V	ARIANCE CO	MPLIANC	E REPO	ORT				
Month/Year										
Metal Value for Month										
	Cu	Ni	Sn	Au	Ag	Pd	Pt	Values Are Issued Monthly  By WRC Headquarters		
Value in Dollars								by whe reduquaters		
Date Received	Shipment ID	Date Compliance Test Completed	Compliance Test Result P-Pass, F-Fail	Qualifying Criteria						
5/1/2012	1205-xxx	6/6/2012	Р	Cu content is greater than or equal to 2%						
5/2/2012	1205-xxx			Received as Non-Hazardous Material						
5/2/2012	1205-xxx	5/10/2012	F	Shipments suspended. Stream is being resampled. Sample must meet variance or contract will be canceled.						
5/3/2012	1205-xxx	5/24/2012	F	Stream contract canceled. No longer receiving material.						
5/3/2012	1205-xxx			Received as D005, D007, D008, D009						
5/9/2012	1205-xxx	5/15/2012	P	Precious Metal Value exceeds the Value of 2% Cu						

## REPORT EXAMPLE

VARIANCE MATERIAL SHIPMENTS									
Month/Year									
Maximum cyanide content of each shipment of Variance material cannot exceed 590ppm									
Variance Material Shipment ID#	Date of Variance Material Shipment	Cyanide Content ppm							
1205-xxx	05/03/2012	125							
1205-xxx	05/04/2012	41							
1205-xxx	05/11/2012	36							