Block Environmental Services (BES)
2451 Estand Way
Pleasant Hill, California, 94523

July 07, 2002

Ms. Mimi Synder
The ARK Enterprises
807 S. Bridle Trail Lane
Peculiar, Mo, 64078

Subject: Hazardous Waste Evaluation of P.O.L. Sorb

Ms. Synder:

Block Environmental Services (BES) is pleased to provide you the results and interpretation of the chemical data for the subject product. The sample analysis was evaluated with respect to compliance with the Resource Conservation and Recovery Act (RCRA) and the California Hazardous Waste Control Law hazardous waste characteristics.

All tests were performed by laboratories, which are accredited by the California Department of Health Services for the appropriate tests. Interpretation of the laboratory data is presented below. The hazardous waste characteristics which the sample was compared to are found in Title 22 of the California Code of Regulations (CCR), Chapter 11, Division 4.5.

The pH of the sample was 4.1. The characteristic of corrosivity of a waste is defined in Title 22 CCR, Section 66261.22 (40 CFR 261.22) as having a pH of <2 or >12.5. Because the pH of the sample was >2 and <12.5, the sample would not be considered to have the characteristic of corrosivity.

The flashpoint of sample was >140^{o} F and therefore would not exceed the regulatory threshold level for ignitability. According to Section 66261.21, Title 22, CCR (40 CFR 261.21), if the flashpoint is <140^{o}F, the waste would exhibit the characteristic of ignitability. Because the sample flashpoint is greater than 140^{o}F, the sample would not exhibit the ignitability characteristic.

Reactivity was not determined on the sample. However, based on chemical analysis of the sample, no constituents were found which would cause reactivity as defined in Section 66261.23, 22 CCR (40 CFR 261.23). Therefore, the wastewater would not exhibit the reactivity characteristic.

The toxicity characteristic is defined in Section 66261.24, 22 CCR and 40 CFR 261.24. This section establishes threshold limit values for a list of regulated inorganic and organic constituents. Chemical analysis conducted on the sample included EPA Method 8270 for semivolatile organic compounds. All metals listed in Section 66261.24 were analyzed using EPA Method 3050, 6010 and 7471. Volatile organic chemicals (VOCs) were not analyzed in the sample because the solid material by its chemical properties would not contain VOC compounds.

Also, the product's lack of a flashpoint is also indicative that it contains no VOC compounds. The total concentration of the product was determined. The EPA TCLP procedure dilutes the sample by a factor of 20 and the California WET dilutes a sample by a factor of 10. Therefore, the total concentration of chemicals analyzed in the product was a more conservative analysis and is allowed by both the Federal EPA and California Department of Health Services as an acceptable analytical approach.

Only those chemicals above a detectable concentration are listed. No semi volatile organic compounds were detected in the sample.

Chemical	Concentration mg//kg	STLC mg/L	TTLC Mg/Kg
Arsenic	3.8	5.0*	500
Barium	33	100*	10,000
Lead	2.4	5.0*	1000
Copper	2.5	25	2,500
Nickel	1.7	20	2,000
Vanadium	1.1	24	2,400
Zinc	14	250	5,000

STLC Soluble Threshold Limit Concentration
TTLC Total Threshold Limit Concentration
* Same value as EPA TCLP threshold characteristic

Therefore, there were no constituent chemicals found in the product which exceeded its corresponding threshold level listed in section 66261.24, 22 CCR In addition, the aquatic bioassay test using fathead minnows produced a 96-hr LC50 greater than 750 mg/L for the sample. Because the toxicity test data produced a 96-hr LC50 greater than 500 mg/L the sample would not be considered toxic based on the fish toxicity criteria. Based on the results of the chemical testing and the aquatic bioassay, the sample does not exhibit the toxicity characteristic either as a California hazardous waste or as a RCRA waste.

In summary, the sample was evaluated for hazardous waste characteristics. The sample did not exhibit the corrosivity, ignitability, reactivity or toxicity characteristic as defined in Title 22 CCR (California Code of Regulations) and 40 CFR 261 (Code of Federal Regulations). Therefore, the product as received would not be regulated as a hazardous waste in California and in other states, which utilize the RCRA 40 CFR 261 regulations for waste characterization. Therefore, if the product were disposed of it would not have to managed as a hazardous waste.

According to section 66260.200 (c), 22 CCR, a generator may self-classify their waste to determine if the waste is hazardous as described, and manage the waste in accordance with that classification. Based on the attached analytical data and chain of custody, the material would

not have to be managed as a hazardous waste. Even though the classification is self-classified as non hazardous, a Federal, State, or local environmental health agency has the authority to sample the waste to ensure that the classification was performed correctly. Should the product be altered in any way, it will be necessary to have the altered product re- analyzed for hazardous waste constituents.

All laboratory data and chain of custody forms are attached.

Very truly yours,
Block Environmental Services, Inc.

Ronald M. Block, Ph.D., REA
Principal Toxicologist

<: Less than Minimum Detection Level BDL: Below Detection Lmit ND: None Detected NF: Not Found			ZENON ENVIRONMENTAL INC.		ANALYTICAL SERVICES INC.		WADSWORTH/ALERT LABORATORIES INC.				M.B. ASSAY LABORATORIES	
							1:1 MIXTURE		3:1 MIXTURE			
EPA Nr.	CONSTITUENT	REGULATORY LIMIT (mg/l)	DETECT LIMIT (mg/l)	RESULT (mg/l)	DETECT LIMIT (mg/l)	RESULT (mg/l)	DETECT LIMIT (mg/l)	RESULT (mg/l)	DETECT LIMIT (mg/l)	RESULT (mg/l)	DETECT LIMIT (mg/l)	RESULT (mg/l)
VOLATILE ORGANICS												
D018	Benzene	0.5	–	–	0.2	0.01	0.25	ND	0.25	ND	0.02	NF
D019	Carbon Tetrachloride	0.5	–	–	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D021	Chlorobenzene	100	–	–	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D022	Chloroform	6	2.5	<	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D028	1,2,-Dichloroethane	0.5	–	–	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D029	1,1,-Dichloroethane	0.7	–	–	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D035	Methyl Ethol Keytone	200	–	–	0.2	BDL	0.25	ND	0.25	ND	0.02	NF
D038	Pyridine	5	–	–	0.2	BDL	1	ND	4	ND	0.02	NF
D039	Tetrachloroethylene	0.7	–	–	0.2	BDL	0.25	ND	0.025	ND	0.02	NF
D040	Trichloroethylene	0.5	–	–	0.2	BDL	0.25	ND	0.025	ND	0.02	NF
D043	Vinyl Chloride	0.2	–	–	0.2	BDL	0.5	ND	0.05	ND	0.02	NF
SEMI-VOLATILE EXTRACTABLE ORGANICS												
D026	Total Cresol	200	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D027	1,4,-Dichlrobenzene	7.5	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D030	2,4,-Dinitrotoluene	0.13	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D032	Hexachlorobenzene	0.13	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D033	Hexachloro Butadiene	0.5	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D034	Hexachloroethane	3	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
D036	Nitrobenzene	2	–	–	0.01	BDL	1	ND	4	ND	0.022	NF
D037	Pentachlorophnol	100	–	–	0.01	BDL	5	ND	20	ND	0.02	NF
D041	2,4,5,-Trichlorophenol	400	–	–	0.01	BDL	5	ND	20	ND	0.02	NF
D042	2,4,6,-Trichlorophenol	2	–	–	0.01	BDL	1	ND	4	ND	0.02	NF
CHLORINATED PESTICIDES												
D013	Lindane	0.4	0.02	<	–	–	0.001	ND	0.005	ND	0.02	NF
D031	Heptachlor	0.008	0.02	<	–	–	0.001	ND	0.005	ND	0.004	NF

–	Heptachlor Expoxide		0.02	<	–	–	0.001	ND	0.005	ND	–	–
D012	Endrin	0.02	0.02	<	–	–	0.002	ND	0.01	ND	0.01	NF
D020	Chlordane	0.03	0.02	<	–	–	0.01	ND	0.05	ND	0.015	NF
D014	Methoxychlor	10	0.05	<	–	–	0.01	ND	0.05	ND	0.02	NF
D015	Toxaphene	0.5	0.05	<	–	–	0.02	ND	0.1	ND	0.25	NF
HERBICIDES												
D016	2,4,-D	10	0.2	<	–	–	0.1	ND	0.1	ND	0.02	NF
D017	2,4,5,-TP (Silvex)	1	0.1	<	–	–	0.01	ND	0.01	ND	0.02	NF
METALS												
D011	Silver	5	0.01	<	–	–	0.01	ND	0.01	ND	0.1	NF
D004	Arsenic	5	5	<	–	–	0.3	ND	0.3	ND	0.1	NF
D005	Barium	100	0.001	0.34	0.1	1.94	0.2	ND	0.2	ND	0.1	0.87
D006	Cadmium	1	0.002	<	0.01	0.02	0.005	ND	0.005	ND	0.1	NF
D007	Chromium	5	0.004	<	0.01	BDL	0.01	ND	0.01	ND	0.1	NF
D009	Mercury	0.2	0.2	<	–	–	0.001	ND	0.001	ND	0.01	NF
D008	Lead	5	0.02	0.04	0.025	0.05	0.05	ND	0.05	ND	0.1	NF
D010	Selenium	1	5	<	–	–	0.3	ND	0.3	ND	0.1	NF