Vista Chemical Company

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Blane

June 13, 1988

VISTA

Mr. Steve Shoger
BP Chemicals Inc.
200 Public Square (30D2753)
Cleveland, OH 44114-2375

Dear Steve:

As we discussed, enclosed is a copy of the confirmatory sampling done in response to the EC Jordan report. Concerning the recommendations on Page 3 it should be noted that Item 1 will be a part of the actual closure plan for the lagoon. Item 2 is not related to the lagoon closure.

Also, I responded in writing to your concerns regarding the costs of the EC Jordan proposal in a May 25 letter to Richard Read. I would appreciate knowing if our response adequately addressed your concerns.

Sincerely,

Thomas G. Grumbles, C.I.H.
Environmental Quality Manager

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cc Richard Read
W. L. McClain (w/o enc.)
D. A. Campanella "

VVV 000014673

Weston & Sampson
Engineers, Inc.

Officers
Associates

Environmental Consultants One Pleasant Island Road, Wakefield, Massachusetts 01880 617-246-4410

This is a FAX
cc J Goyette B. McClain
T Grumbles G Williams

June 8, 1988

Mr. David A. Campanella
Blane Plymers
751 North Main Street
Mansfield, Massachusetts 02048

Re: 8833.1 Confirmatory Sampling

Dear Mr. Campanella:

Weston & Sampson Engineers, Inc. has completed the confirmatory samplings as discussed in our April 8, 1988, letter proposal. The sampling was intended to verify the results of sampling conducted by E. C. Jordan, a contractor to the Massachusetts Department of Environmental Quality Engineering (DEQE). The E. C. Jordan sampling was conducted on August 21, 1987, and reported to DEQE and the Region 1 Office of the United States Environmental Protection Agency (EPA) under the title "Site Insection Report for Reidhold Chemical Inc., Mansfield Massachusetts, dated September 1987."

The E. C. Jordan sampling locations include two lagoon sites and one in the Rumsford River, Figure 1. Surface water and sediment samples where collected at each of these sites. Sample identifications are listed in Table 1.

Weston & Sampson's sampling program duplicated in part the E. C. Jordan work. Surface water and sediment samples were collected from sample location #1 and sample location #3, as illustrated in Figure #1. Samples were analyzed for volatile organic compounds, EPA Methods 624 or 8240, priority pollutant metals and base neutral extractables, EPA Methods 625 or 8250. Analytical laboratory reports are located in the appendix and are summarized in Table 2. Samples were collected on April 28, 1988, and delivered the same day to the laboratory.

A summary of the results comparing the findings of E. C. Jordan with samples collected by Weston & Sampson is presented in Table 2 and provides the following insights.

- No volatile organic compounds including carbon disulfide, were identified during the Weston & Sampson sampling program in either the surface water of the lagoon or the river.

- Base neutral extractable analysis identified 59 ug/l of phthalates in SW-1-DUP of the lagoon surface water. This is attributed to sediment disturbance during sample collection and is not considered to be representative of dissolved constituents in the lagoon water.

- Metals concentration in the river surface water were three to six times less in concentration than those identified by E. C. Jordan. This can be attributed to a dilution effect . The E. C. Jordan samples were collected in August during a period of low rainfall. Weston & Sampson's Program was conducted in April during a percipitation event resulting in the dilution or dissolved constituents.

- During the present sampling, lead was the constituent which exceeded the safe drinking water standard. Cadium was equal to the standard.

- No phthalates were detected in the river water sample contrary to E. C. Jordan's results

- Lagoon sediment samples confirm the presence of metals and phthalates detected by E. C. Jordan. Higher concentrations of copper, lead and phthalates were detected in the most recent samples.

- River sediment analysis confirmed the presence of metals. Again, concentrations of copper and lead are higher than those previously detected by E. C. Jordan.

- Phthalates were detected in the river sediments where they were not previously detected by E. C. Jordan.

Several differences are identified between the E. C. Jordan and Weston & Sampson sample results. The lower metals concentrations in the lagoon and river water samples detected by Weston & Sampson may be attributed to sample handling. The Weston & Sampson samples were filtered by the laboratory prior to fixation to a pH of 2. Filtration would eliminate any contaminants which would be associated with suspended sediment. Lower concentrations can also be attributed to a dilution effect caused by spring river flow and a precipitation event at the time of sampling. E. C. Jordan samples were collected during the month of August where Weston & Sampson's program was conducted in April during a storm event. The detection of phthalates in river

water is likely to be the result of unfiltered sample; phthaltales are not very soluble and readily absorb to sediments. This round of samples identified the presence of phthalates in the stream sediments. The discrepancy between sample results can possibly be attributed to sampling methods and the sediment strata collected. Phthalates tend to accumulate in organic sediments due to the absorptive nature of organic sediments.

Conclusion

The findings of the confirmatory sampling lead Weston & Sampson to conclude:

1. No volatile/purgeable organic compounds, detected by EPA method 624 for water and 8240 for sediment, are present in the lagoon or river surface water or sediment.

2. No phthalates are present in the lagoon water or river water.

3. Both lagoon and river sediments contain metals and phthalates. Some of constituents in the lagoon will be assumed by DEQE to be from Blane. River constituents could be from an up-stream source.

The following recommendations are offered on the finding and conclusion of the confirmatory sampling:

1. Conduct one final EP toxicity analysis on a lagoon sediment composite sample to determine if material benefits RCRA waste categories.

2. Sample for metals and phthalates up stream and down stream of sample location 3.

3. Start discussion with DEQE on requirements for lagoon closure.

Weston & Sampson is prepared to meet with Blane to discuss our conclusions and recommendations. If you have any question or require additional information, please do not hesitate to call.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

Meeting scheduled
9AM FRIDAY 6/10/88

Paul G. Sutton
Project Manager

PGS:djl

Attachments (2)

(B-233)

TABLE 1 SAMPLE IDENTIFICATION
LAGOON & RIVER SAMPLES
BLANE POLYMER
MANSFIELD, MASSACHUSETTS

Sample ID	Sample Matrix	Sample Location	Sampler
SW-1	Surface Water	Lagoon	E.C. Jordan
SW-2	Surface Water	Lagoon	E.C. Jordan
SW-3	Surface Water	Rumford River	E.C. Jordan
SED-1	Sediment	Lagoon	E.C. Jordan
SED-2	Sediment	Lagoon	E.C. Jordan
SED-3	Sediment	Rumford River	E.C. Jordan
SW-1	Surface Water	Lagoon	Weston & Sampson
SW-2	Surface Water	Rumford River	Weston & Sampson
SS-1	Sediment	Lagoon	Weston & Sampson
SS-2	Sediment	Rumford River	Weston & Sampson

TABLE 2 RESULTS OF CONFIRMATORY SAMPLING FROM
LAGOON AND RIVER BLANE POLYMERS MASSACHUSETTS

	Surface Water (mg/l)				Sediment (mg/kilogram)					
	Lagoon		River		Lagoon	River				
Compounds Detected Metals	SW-1 E.C.J[1]	SW-1 W&S[2]	SW-1 DUP W&S	SW-2 ECJ	SW-2 W&S	SED-1 ECJ	SS-1 W&S	SS-1 DUP W&S	SED-3	SED-3 DUP	SS-2 W&S
Antimony						15.13			56.45	22.81	
Arsenic	0.15			0.1		77.47	6.6		80.78	83.33	5.2
Cadmium					0.01	7.35	7.0		13.97	1.59	18
Chromium						12.79	47		82.76	7.69	38
Copper	0.07			0.13	0.02	122.16	350		91.58	74.66	100
Mercury							2.0		2.28	.38	0.48
Nickel	0.03			0.39		14.99	15		17.2	10.37	12
Lead				0.34	0.09	56.15	210		302.38	25.01	400
Zinc	0.22			0.28	0.10	58.8	180		21.78	27.33	180
Selenium						52.33			29.99	42.46	
Thallium						32.34			36.75	ND	
Base/Neutral Extractables											
Di-N-Butylphthalate						28					4.3
Butylbenzylphthalate											18
Bis(2-ethylhexyl) phthalate			59[3]	157		196	300	150			370
Di-N-Octylphthalate				11			470	110			10

1. E.C.J. = E.C. Jordan sample results from 8-21-87 sampling
2. W&S = Weston & Sampson Sampling results from 4-28-88 sampling
3. 59 ug/l found in duplicate not detected in primary sample
4. Concentrations for SED-3 are average of primary sample and duplice analysis.

VVV 00001679

Weston & Sampson

TO: R. D. Gamblin

FROM: T. G. Grumbles
DATE: June 10, 1988

Interoffice Communication

SUBJ: PROGRESS REPORT

VISTA

1. EPA has finalized a rule charging a fee of from 700 - 184,000 for pesticide registration and registration amendment actions. Unless registration requirements for Tobacco Sucker alcohols change, there should be no impact on Vista.

2. FDA has indicated it may be taking final action on it's proposal of four years ago to revoke the Generally Recognized as Safe (GRAS) status of "by-product" muriatic acid. We are participating with an ad-hoc acid group organized by the International Food Additives Council (IFAC) to address the recent activity with the FDA.

   Preliminary indications are that the agency may specifically affirm by-product acid from some processes. Detergent alkylate processes may be included in the approved list.

3. OSHA has proposed to revise approximately 200 Permissible Exposure Limits by revising the Permissible Exposure Limit tables. We have not seen the proposal yet but will reviewing the revisions, when available, to determine the impact on Vista.

4. Completed SDA questionnaires regarding alcohol ethoxylate exposures and Proposition 65 activities and needs.

5. The CLER Communications Committee met with Procter and Gamble to discuss CLER's Communications program. Meetings are scheduled with Lever, Colgate, SDA, and Dial to discuss the same topics.

6. JCL attended the CLER Technical Committee meeting on 6/9.

7. EPA's proposal on the Toxicity Characteristic was reviewed and a memo issued advising of the impact on Vista. EPA is proposing a methodology to calculate regulatory levels that would reduce the impact on industry over the previous proposal.

8. A plan was developed to begin addressing environment careers and workload. Formation of teams to identify options will occur in July.

9. The Premanufacture Notification (PMN) for the product V-2000 or V-170B was sent to EPA on June 6, 1988.

10. An MSDS for tin-stabilized rigid PVC compound produced at Premiere was completed.

11. MMG attended a meeting between Vista and Ferro to discuss the PMN filing for the stabilizer BP-3235.

12. A sample of Novel 10-44 Alcohol Ethoxylate and Novel 10-44 Ether Sulfate was sent to Stillmeadow for toxicity testing.

T. G. Grumbles

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