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REPORTS

DATE:

4/2/1998

Tipperary
CORPORATION

633 Seventeenth Street
Suite 1550
Denver, Colorado 80202

April 2, 1998

CERTIFIED MAIL

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Progress Report
Tatum Pit Closure Project
Lea County, NM

Dear Mr. Olson:

Please find enclosed additional results from our monitor wells in the subject project area. These results are from water samples taken on March 23, 1998. The total BTEX concentrations have declined significantly from the December 1997 sample results. We are currently planning to analyze water samples quarterly from the project monitor wells.

If you have any questions, please call me at (303) 293-9379.

Very truly yours,

Larry G. Sugano

Larry G. Sugano
Vice President - Engineering

cc: Wayne Price, NMOCD Hobbs Office

Enclosure

Executive Summary
Tipperary Corporation
Tatum Pit Closure Project
March, 1998 Well Sampling

Procedures

On March 23, 1998, Mr. Vic Vice, Tipperary Production Foreman, sampled the fluid contents of twenty-three monitoring wells in accordance with WEQP-76. The samples were delivered the next day to Environmental Labs of Texas and results provided to Whole Earth Environmental on March 26, 1998. Analysis methods and QA / QC data are provided on the laboratory report.

Whole Earth prepared various spreadsheets and graphs comparing the results to those of two prior sampling events.

Results

The total BTEX concentrations within the monitoring wells are shown to decline by an average of 20% per quarter. There was a 39% increase in the number of wells having all individual BTEX compound concentrations within WQCC standards. Though benzene remains the principal contaminant, the benzene concentrations were reduced by an average of 31% from the December sampling indicating that the "slug" resultant from the closure activities is now passing the monitoring perimeter.

Conclusions

The process of natural attenuation is demonstrated to be working. In June one and possibly two pit sites should be considered for final closure as it is expected that they will have shown four consecutive quarters of BTEX concentrations falling below New Mexico WQCC standards.

The construction of any additional delineation wells is not recommended at this time. One additional sampling round should provide us with enough statistical data to forecast which wells (if any) will require further testing.

Tipperary Corporation
Sampling Instructions
June 1, 1998 Sampling Round

1. Sample Monitor Wells # 1-24 as performed on 3/23/98 sampling round.

2. Sample Iva COM source well for BTEX. If results are acceptable, we will then immediately test for PAH's. If PAH results are acceptable, we will request formal closure from the State. *(The State may require additional witnessed sampling for final closure).*

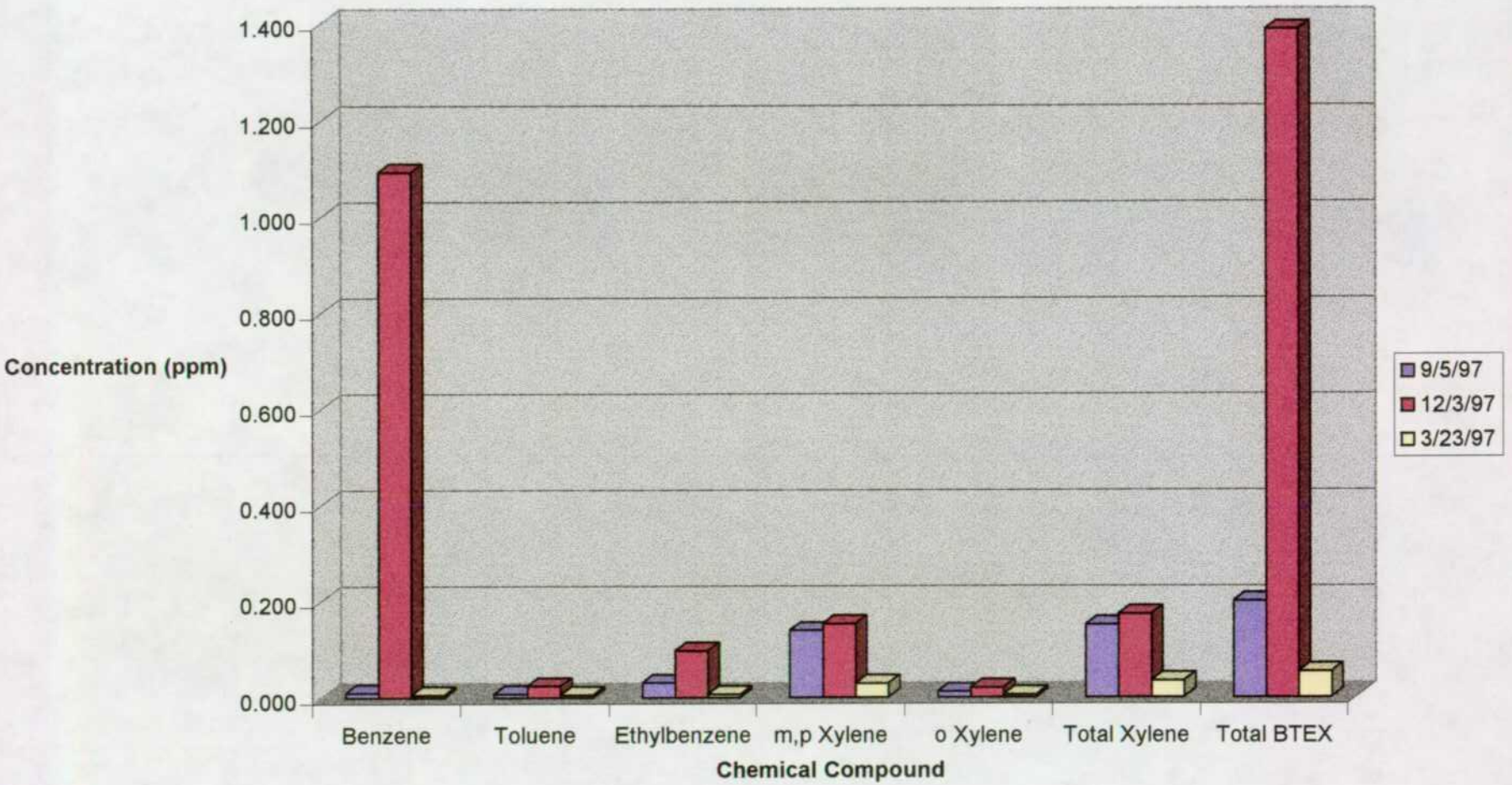
3. Sample Vera for PAH's. Use 1 liter amber jar with no preservatives for PAH and 1 liter clear jar with H_2SO_4 preservative for metals in addition to your normal BTEX sample vial. If PAH's are acceptable, we will request immediate closure. *(PAH & RCRA 8 metals were all within limits on 9/5/97 sampling).*

4. Save G.S. State monitor well # 12 for last. Pump well bore for at least 30 minutes in an attempt to remove all of the free product from the sample. If free product is still present, forward the sample to the lab anyway with instructions to additionally run TPH analysis.

Monitor Well # 3
Mable COM
Sampling Results

Lab. #	12488	13177	14059
Sample Date	9/5/97	12/3/97	3/23/97
Benzene	0.010	1.093	0.006
Toluene	0.008	0.024	0.006
Ethylbenzene	0.031	0.097	0.007
m,p Xylene	0.139	0.153	0.029
o Xylene	0.012	0.02	0.006
Total Xylene	0.151	0.173	0.035
Total BTEX	0.200	1.387	0.054

Monitor Well # 3



Monitor Well # 4
Mable COM
Sampling Results

Lab. #	12489	13178	14060
Sample Date	9/5/97	12/3/97	3/23/98
Benzene	0.015	1.465	0.019
Toluene	0.002	0.007	0.004
Ethylbenzene	0.002	0.017	0.002
m,p Xylene	0.010	0.01	0.019
o Xylene	0.002	0.002	0.003
Total Xylene	0.012	0.012	0.022
Total BTEX	0.031	1.501	0.047

Monitor Well # 4