New Castle County
Department of Public Works
Albert W. Madora
Director
Melvin A. Slawik
County Executive
2701 Capitol Trail • Newark, Delaware 19711 • (302) 571-7600

OFFICE OF DIRECTOR
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Mike Apgar
R. Tomlin
please review
Landfill
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STATE OF DELAWARE
ENVIRONMENTAL CONTROL DIVISION

December 22, 1975

N. C. Vasuki, Director
Division of Environmental Control
Edward Tatnall Building
Dover, Delaware 19901

Dear Mr. Vasuki:

Attached is a copy of Interim Report No. 4 on the groundwater level monitoring program at the Tybouts Corner Landfill.

Very truly yours,

Albert W. Madora

Albert W. Madora
Director of Public Works

AWM:mac

Attachment

cc: Mr. Pasquale Canzano

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EDWARD H. RICHARDSON ASSOCIATES, INC.
CONSULTING ENGINEERS • LANDSCAPE ARCHITECTS
PLANNERS • SURVEYORS
GENERAL OFFICES: RICHARDSON BUILDING • 320 SOUTH CHAPEL STREET • NEWARK • DELAWARE
MAIL ADDRESS: P.O. BOX 675 • NEWARK • DELAWARE 19711 PHONE (302) 738-7551

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COMM. NO.: 1233-47-3 DECEMBER 17, 1975

NEW CASTLE COUNTY
DEPT. OF PUBLIC WORKS
2701 CAPITOL TRAIL
NEWARK, DE 19711

ATTENTION: MR. DAVID CLARK

RE: TYBOUTS CORNER LANDFILL
INTERIM REPORT NO. 4 -
GROUNDWATER LEVEL MONITORING

GENTLEMEN:

IN ACCORDANCE WITH THE MONITORING PROGRAM, ESTABLISHED FOR THE TYBOUTS CORNER LANDFILL, WE HAVE MEASURED GROUNDWATER LEVELS ON DECEMBER 10, 1975. A SUMMARY OF THESE DATA ARE ENCLOSED.

COMPARISON OF THESE DATA WITH SIMILAR DATA, FROM NOVEMBER 5, 1975, INDICATES THAT NO SIGNIFICANT CHANGE HAS OCCURRED DURING THE PERIOD. NINETEEN (19) MONITORS SHOW A DECREASE (AVERAGE 0.3 FT.), SIX (6) MONITORS SHOW AN INCREASE (0.3 FT.), SEVEN (7) SHOWING NO CHANGE. IN TERMS OF SITE GEOGRAPHY, THE CENTRAL PORTION OF THE SITE SHOWS A GENERAL DECREASE OF APPROXIMATELY 0.2 FEET, WHILE THE SOUTHEASTERN QUARTER OF THE SITE SHOWS A GENERAL INCREASE OF APPROXIMATELY 0.3 FEET.

AS NOTED IN OUR INTERIM REPORT OF NOVEMBER 10, 1975 AND IN OUR TELEPHONE CONVERSATION OF THIS MORNING, SURFACE, LEACHATE SEEP ACTIVITY IS STARTING TO INCREASE; PRINCIPALLY ALONG THE NORTHWESTERN BOUNDARY OF THE FILL AREA. IN GENERAL, THERE APPEARS TO BE THREE (3) AREAS OF ACTIVE SEEPAGE, AS EVIDENCED BY STAINING OF THE SOILS AND THE DISTINCTIVE LEACHATE ODER. THE FIRST OF THESE IS SITUATED IN THE EROSION GULLY, WHICH PARALLELS ROUTE 71. THE SECOND IS SITUATED APPROXIMATELY HALFWAY BETWEEN ROUTE 71 AND THE WOODLAWN WASHING PLANT. THE THIRD IS THE DEEP DITCH, WHICH WAS UTILIZED TO CARRY SILT LADEN WATER AWAY FROM THE WASHING PLANT. AS DISCUSSED, WE ARE IN AGREEMENT WITH YOUR OPINION, THAT THIS SEEPAGE IS PROBAIBLY MORE OF A PROBLEM FROM AN AESTHETIC POINT OF VIEW THAN AS A THREAT TO PIGEON RUN; PARTICULARLY IN LIGHT OF THE APPARENT SMALL VOLUMES BEING PRODUCED (THE LARGEST FLOW VOLUME OBSERVED, ON OUR VISIT OF DECEMBER 10, 1975, IS ESTIMATED TO BE LESS THAN FIVE (5) GALLONS PER MINUTE). HOWEVER, THE VOLUME AND AREAS OF SEEPAGE HAS INCREASED. THIS SHOULD BE CONSIDERED

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AS THE EARLY STAGE OF A POTENTIAL PROBLEM. WE BELIEVE SOME ACTION AT THIS POINT IS REQUIRED TO ASSESS THIS POTENTIAL PROBLEM. ACCORDINGLY, WE PROPOSE TO UTILIZE SOME OF THE FUNDS ALLOCATED FOR THE GROUNDWATER MONITORING STUDY TO EVALUATE THE QUALITY OF THE SURFACE WATERS BETWEEN ROUTE 71 AND U.S. 13. IN ORDER TO ACCOMPLISH THIS ADDITIONAL INVESTIGATION, WITHOUT INCREASING OUR FEE, THIS WILL NECESSITATE A CHANGE IN THE SCOPE OF OUR PRESENT WORK. TO ALLOW FOR THIS EVALUATION, WE SUGGEST THAT THE PRESENT PROGRAM BE SHORTENED TO TERMINATE IN JUNE RATHER THAN AUGUST. THIS WILL PERMIT US TO UTILIZE THE AVAILABLE FUNDS IN A MANNER WHICH MORE APPROPRIATELY REFLECTS THE EXISTING SITE CONDITIONS. IF THIS IS ACCEPTABLE WITH THE DEPARTMENT, PLEASE NOTIFY US, AS SOON AS POSSIBLE, SO THAT THE INVESTIGATION CAN BE INITIATED.

WE BELIEVE THAT IT WOULD BE BENEFICIAL TO HAVE SOMEONE IN THE PUBLIC WORKS DEPT. FAMILIAR WITH THE SEEPAGE CONDITIONS. AS DISCUSSED, WE SUGGEST THAT YOU, OR SOMEONE FROM YOUR SECTION, ACCOMPANY US ON OUR NEXT SITE RECONNAISSANCE. THIS WOULD PUT YOUR OFFICE IN A BETTER POSITION TO HANDLE COMPLAINTS, SHOULD THEY ARISE. THE NEXT RECONNAISSANCE AND WATER LEVEL MONITORING IS, TENTATIVELY, SCHEDULED FOR THE SECOND OR THIRD WEEK IN JANUARY.

IF YOU HAVE ANY QUESTIONS REGARDING THE ABOVE, OR IF WE CAN BE OF FURTHER ASSISTANCE, PLEASE DO NOT HESITATE TO CONTACT US.

VERY TRULY YOURS,

EDWARD H. RICHARDSON ASSOCIATES, INC.

Glenn K. Elliott

GLENN K. ELLIOTT

GKE:DDC

ENCLOSURES

CC: MR. A. W. MADORA
MR. J. F. DUFFIELD

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GROUNDWATER ELEVATION
AT
TYBOUTS CORNER LANDFILL

MONITOR NUMBER	10-7-74	1-23-75	3-5-75	9-17-75	11-5-75	12-10-75
P-1	37.4 FT.	37.4 FT.	37.6 FT.	38.9 FT.	40.0 FT.	39.2 FT.
P-2	37.7 FT.	---	---	---	---	---
P-3	30.2 FT.	31.0 FT.	31.2 FT.	---	31.0 FT.	31.0 FT.
P-5	29.3 FT.	30.6 FT.	30.2 FT.	30.4 FT.	30.6 FT.	30.4 FT.
P-7	38.6 FT.	38.6 FT.	38.6 FT.	40.8 FT.	39.9 FT.	40.2 FT.
MP-1	38.7 FT.	38.7 FT.	38.6 FT.	40.8 FT.	40.5 FT.	40.3 FT.
MP-2	35.7 FT.	36.0 FT.	35.3 FT.	36.2 FT.	36.1 FT.	36.3 FT.
MP-3	32.0 FT.	33.3 FT.	33.2 FT.	33.5 FT.	33.7 FT.	33.5 FT.
MP-3A	31.9 FT.	33.5 FT.	33.2 FT.	33.4 FT.	33.7 FT.	33.3 FT.
MP-4	34.6 FT.	35.3 FT.	35.9 FT.	36.6 FT.	36.5 FT.	36.4 FT.
MP-5F	22.9 FT.	24.5 FT.	24.0 FT.	24.3 FT.	24.5 FT.	24.5 FT.
MP-5G	38.6 FT.	38.6 FT.	38.5 FT.	40.4 FT.	39.6 FT.	40.0 FT.
MP-6	5.5 FT.	5.4 FT.	6.2 FT.	6.0 FT.	5.3 FT.	5.9 FT.
MP-7	27.5 FT.	29.5 FT.	29.2 FT.	28.6 FT.	28.7 FT.	28.5 FT.
MP-8	24.9 FT.	---	25.3 FT.	25.1 FT.	25.0 FT.	24.3 FT.
MP-10	26.2 FT.	27.2 FT.	27.2 FT.	26.7 FT.	27.1 FT.	26.9 FT.
MP-11	30.7 FT.	31.7 FT.	31.9 FT.	31.5 FT.	31.9 FT.	31.7 FT.
MP-12	36.1 FT.	37.0 FT.	36.7 FT.	37.5 FT.	37.3 FT.	37.1 FT.
MP-13	24.2 FT.	26.8 FT.	24.8 FT.	---	24.5 FT.	24.9 FT.
MP-14	29.3 FT.	30.6 FT.	30.1 FT.	29.9 FT.	30.4 FT.	30.2 FT.
MP-15	19.5 FT.	20.7 FT.	20.0 FT.	---	---	---
MP-16	12.0 FT.	12.8 FT.	11.8 FT.	---	12.1 FT.	12.1 FT.
MP-17	15.2 FT.	16.3 FT.	15.5 FT.	15.0 FT.	15.1 FT.	14.9 FT.
MP-18	24.3 FT.	27.4 FT.	26.2 FT.	27.0 FT.	27.1 FT.	26.7 FT.
MP-18A	32.2 FT.	32.8 FT.	32.5 FT.	33.0 FT.	33.3 FT.	33.2 FT.
MP-19	5.8 FT.	6.6 FT.	5.9 FT.	---	5.8 FT.	5.8 FT.
MP-20	8.1 FT.	9.3 FT.	8.6 FT.	---	8.7 FT.	8.4 FT.
MP-21	7.0 FT.	7.1 FT.	6.5 FT.	6.2 FT.	6.3 FT.	6.3 FT.
P-23	2.3 FT.	2.9 FT.	2.8 FT.	2.5 FT.	2.9 FT.	[illegible] FT.
P-24	3.3 FT.	3.5 FT.	3.3 FT.	3.2 FT.	3.4 FT.	3.4 FT.
MP-27	34.8 FT.	36.0 FT.	36.8 FT.	---	37.2 FT.	36.1 FT.
MP-28	4.6 FT.	5.2 FT.	4.5 FT.	4.5 FT.	4.8 FT.	4.5 FT.
MP-29	16.5 FT.	16.6 FT.	16.6 FT.	16.7 FT.	16.8 FT.	16.8 FT.
MP-30	24.1 FT.	24.8 FT.	24.6 FT.	24.1 FT.	24.2 FT.	24.4 FT.

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