Pamela Mylotta - DNR-HKE

FID 230139360
ERR/ERP

Pheasant Run Recycling & Disposal Facility
19414 60th Street
Bristol, Wisconsin 53104
414/857-7956

A Waste Management Company

July 20, 1995

Mr. David Panofsky
Bureau of Solid Waste Management
Wisconsin Department of Natural Resources
101 South Webster Street
PO Box 7921
Madison, WI 53707

RE: Bioremediation Variance Request
Chrysler Corporation Contaminated Soil
Kenosha Engine Plant

This letter documents the Pheasant Run RDF request for a special waste variance to bioremediate petroleum contaminated soils containing chlorinated compounds. The Chrylser Corporation Kenosha facility has been involved in site remediation work and has accumulated the soil materials which require treatment and/or disposal. The WDNR Southeast District office, specifically Ms. Pamela Mylotta, has been involved with the remediation project. Mr. Ken Hein has also been aware of this project for some time, and has previously discussed it with you. The source and background information concerning the nature and level of contamination are summarized in the attached July 5, 1995, letter from Chrysler. Limited characterization data is also part of that letter.

Lead concentrations as determined by TCLP analysis indicate hazardous levels in a limited area of the remediation site (Sector 50), but these soils will be segregated. The lead contaminated soils will be managed and disposed of separately and are not to be included in the bioremediation process. Chrysler's remediation consultant, Triad Engineering, Inc. has discussed this issue further in the attached letter dated July 18, 1995.

Extensive analytical results are available to further characterize the contaminated soils. These are being sent to you under separate cover from our Milwaukee office. In summary, the DRO and GRO levels are below 2200 and 220 mg/kg respectively, and the chlorinated compounds are below 17 mg/kg. Our process consultant for bioremediation projects, Mr. Gary Hater, has indicated that the presence of chlorinated compounds in the soil at the reported levels will not inhibit the bioremediation process.

Our intent, therefore, is to bioremediate this volume at Pheasant Run in accord with our processing facility permit (License #3764). The soils have been accumulated in specific piles at the Kenosha facility and total between 20 and 25 thousand cubic yards. The attached waste profile sheet (MW28052) provides some further waste definition.

Pheasant Run proposes to treat the soils and, after confirmation of appropriate treatment, (i.e. less than 250 mg/kg combined DRO, GRO concentrations), to stockpile the processed materials for use as daily cover material. The finished soils will be stockpiled on top of the operating landfill, namely on Phase III, Modules 1 and 2, until used.

This letter addresses the issues raised and discussed during our telephone conversation of July 18, 1995. Again, we request Department approval to accept and bioremediate the Chrysler soils. We further request your prompt review and response to this letter. Should you have any further questions, regarding this approval request, please contact me at (414) 857-7956.

Sincerely,

Robert G. Vallis

Robert G. Vallis, PE
Environmental Engineer

cc: Ken Hein, WDNR-Mke
Pamela Mylotta, WDNR-Mke
Mike Infusino, PhR
Gerard Hamblin, NRO

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CHRYSLER CORPORATION

Chrysler Corporation
Featherstone Road Center

JUL 5 1995
Pollution Prevention
& Remediation

July 5, 1995

Ms. Pamela A. Mylotta
Environmental Repair Project Manager
State of Wisconsin Department of Natural Resources
4041 N. Richards Street
P.O. Box 12436
Milwaukee, WI 53212

RE: Classification of Excavated Soils
Chrysler Corporation – Kenosha Engine Plant
Kenosha, Wisconsin

Dear Ms. Mylotta:

Per your request, this letter has been prepared to document that soils excavated from the Kenosha Engine Plant facility, and described herein, are not listed hazardous wastes as defined under Wisconsin Statute Section 144 and implemented under Chapters NR 600 et al., Wisconsin Administrative Code (WAC). We request your concurrence in order to assess appropriate disposal/treatment options for the soils. Background and source evaluation information is provided in the following sections. Supporting documentation is provided as attachments.

BACKGROUND

Based on available information, approximately 20,000 cubic yards of soils were generated during excavation activities conducted during upgrading of assembly lines and manufacturing areas at the Kenosha Engine Plant. The excavated soils are from the unsaturated and saturated zones. These soils came primarily from the following four locations in the Engine Plant: (1) the modified oil recycling building slab (located north of Building 29C, (2) building 31, (3) Building 23/23A, and (4) Building 53 (Figure 1). The soils were moved to the area of former Buildings 10, 10A, 11, 15B, and 15. This area is currently paved. The soil piles were subsequently divided into 300-yard parcels and individually described and characterized via field screening and laboratory analysis of discreet samples for volatile organic compounds (VOCs; EPA Method 8260), gasoline range organics (GRO; Wisconsin DNR Modified GRO Method), diesel range organics (DRO; Wisconsin DNR Modified GRO Method), and select metals (EPA SW 846 Methods). An evaluation of remedial disposal and treatment options including soil sampling methodologies will be submitted under separate cover at a later date. The approximate size, location, and classifications of the resulting soil piles are depicted on Figures 2 through 4.

2301 Featherstone Road
Auburn Hills MI 48326-2808

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A summary of detected constituents in site soil samples is presented in Tables 1 and 2. Detected constituents include tetrachloroethene (PCE), trichloroethene (TCE), and related breakdown products. Depending on its origin, PCE and TCE may be classified as listed wastes. In order to evaluate soil disposal and/or treatment options, Chrysler reviewed available information to assess the source of the release. The evaluation included conducting interviews with Chrysler personnel and reviewing plant records.

SOURCE EVALUATION

The most likely sources of PCE and TCE may be paint booths that were formerly located along the wall between Buildings 38 and 53, a bulk cleaning fluid storage area formerly located at Building 36, and above-ground paint supply lines from a paint mixing area located in Building 40A. Available information does not indicate the use of PCE near the other excavation areas. Additional Remedial Investigation to evaluate the extent of possible historical releases in these areas is underway.

The paint booths were active from approximately 1946 to 1986. Prior to paint application, metal parts were degreased using various PCE and TCE products. There are no records of spent materials being spilled in the area.

The fluid storage area was used from 1946 to 1988. Reportedly, PCE and TCE may have been spilled during transportation of drums from one area to another. Drums of solvents were stored in Building 36 and transported to other areas via pallets and forklifts. Drums may have leaked during loading and unloading operations. Small amounts of product left in used drums which were not sold may also have been a source of PCE and TCE.

The paint product line was used from approximately 1946 to 1986. Bulk storage of cleaning and paint viscosity adjusting solvents occurred in the area of the former tank farm located at the north end of the Engine Plant. Paint mixing was performed near the test cell area in former Building 40A. As you are aware, Remedial Investigation has been completed in this area. Remedial action, including groundwater recovery/treatment is ongoing. The mixed paint was then transported to the paint booths through several buildings via an above-ground piping system. Excess paint was also piped through the above-ground system back to former Building 40A for reuse. PCE and TCE, mixed with paint, may have been released through accidental discharges or leaks in the piping system. Based on interviews with employees, occasional leaks in PCE/TCE supply lines and occasional overflow from product tanks during filling operations may have occurred.

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It should be noted that Chrysler recognizes its responsibility under NR 600, WAC, to determine whether the soils exhibit hazardous characteristics. If the soils exhibit hazardous characteristics, then they must be handled as characteristic hazardous waste. The soil characterization will be completed prior to submitting the remedial disposal/treatment options analysis.

CONCLUSION

As discussed above, there are a number of potential sources of PCE, TCE, and their breakdown products detected in soil samples from the soil piles. As such, Chrysler concludes that the spilled solvents were not clearly a listed waste, therefore, the soils do not contain a listed hazardous waste and cannot be classified as hazardous by the mixture rules. The soils contain hazardous substances and, unless additional analytical data indicate the soils are hazardous by characteristic, they should be managed under the Wisconsin spills law (s. 144.76) and corresponding regulations (NR 700 series, WAC).

We request your concurrence in order to assess appropriate treatment/disposal options for the soils. I trust this information meets your needs. If you have any questions or comments, please do not hesitate to call.

Sincerely,

CHRYSLER CORPORATION

Gregory M. Rose

W943324\943324.21\943324-B

cc: Curt Chapman/Chrysler
Richard Binder/Triad Engineering

2301 Featherstone Road
Auburn Hills MI 48326-2808

FROM MW NORTHERN REGION ID:1-414-291-0240 JUL 18 '95 11:05 NO.011 P.05

TABLE 1
SOIL PILE CHARACTERIZATION
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS IN SOILS
CHRYSLER CORPORATION
KENOSHA MAIN PLANT, KENOSHA, WISCONSIN

SAMPLE RESULTS (in micrograms per kilogram)

SAMPLE I.D.	DATE COLLECTED	U.S. EPA METHOD	LAB IDENTIFICATION[b]	BENZENE	n-BUTYLBENZENE	sec-BUTYLBENZENE	tert-BUTYLBENZENE	CHLOROBENZENE	1,2-DICHLOROBENZENE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	1,1-DICHLOROETHANE	1,2-DICHLOROETHANE	1,1-DICHLOROETHENE	cis-1,2-DICHLOROETHENE	trans-1,2-DICHLOROETHENE	ETHYL BENZENE	HEXACHLOROBUTADIENE	ISOPROPYLBENZENE	p-ISOPROPYLTOLUENE	METHYLENE CHLORIDE[c]	METHYL TERT BUTYL ETHER	NAPHTHALENE	n-PROPYL BENZENE	TETRACHLOROETHENE	TOLUENE	1,2,3-TRICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	TRICHLOROETHENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE	m & p-XYLENE	o-XYLENE	DRO (mg/kg)	GRO (mg/kg)
1D	3/30/96	8260A	50403020	<5	16	<5	<5	<5	<5	<5	<5	<5	<5	<5	120	<5	<5	<5	<5	<5	<5	<50	<5	<5	7.9	10	<5	<5	<5	5.3	420	35	<5	<5	<10	<5	24	<10
1B2	3/30/96	8260A	50403024	42	<5	<5	<5	<5	19	61	68	<5	<5	<5	1100*	<5	<5	<5	<5	11	<5	<50	<5	<5	6.5	7.2	<5	<5	42	<5	150	8.4	<5	<5	<10	<5	<10	<10
2E	3/30/96	8260A	50403021	<5	12	<5	<5	<5	<5	<5	<5	<5	<5	<5	54	<5	<5	<5	<5	<5	<5	<50	<5	<5	<5	17	<5	<5	<5	<5	160	29	5.1	<5	<10	<5	21	<10
4A	3/30/96	8260A	50403023	5.7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	630	<5	<5	<5	<5	<5	<5	<50	<5	<5	20	11	<5	<5	<5	6.5	540*	7.6	<5	<5	<10	<5	35	<10
5E	3/30/96	8260A	50403022	<5	14	<5	<5	<5	13	<5	18	<5	<5	<5	150	<5	<5	<5	<5	<5	<5	<50	<5	<5	8.4	16	<5	<5	<5	6.8	440	34	<5	<5	<10	<5	<10	<10
6B	3/30/96	8260A	50403025	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	9.7	<5	<5	<5	<5	10	<5	<50	<5	<5	6.8	<5	<5	<5	<5	<5	6.6	13	<5	<5	<10	<5	480	<10
6F	3/30/96	8260A	50403026	5.7	14	<5	<5	<5	<5	<5	<5	<5	<5	<5	170	<5	<5	<5	<5	<5	<5	<50	<5	<5	<5	6.8	<5	<5	<5	<5	<5	17	<5	<5	<10	<5	730	<10
7B	4/5/96	8260A	50407049	<5	4.4	<5	<5	<5	<5	<5	<5	<5	<5	<5	830*	13	<5	<5	<5	<5	<5	<50	<5	<5	<5	6.8	11	10	<5	<5	42	<5	<5	<5	<10	<5	<10	<10
7F	4/5/96	NA	50407050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1600	NA
9E	4/5/96	8260A	50407052	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1400*	180	<5	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	370	<5	<5	<5	<10	<5	<10	<10
9G	4/5/96	NA	50407053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1200	NA
10G	4/5/96	8260A	50407054	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	9100*	200	<5	<5	<5	<5	55	<50	<5	<5	<5	19	19	31	<5	<5	11000*	<5	<5	<5	<10	<5	<10	14
11B	4/5/96	8260A	50407055	<5	<5	<5	<5	<5	18	100	120	8.8	<5	<5	2500*	51	<5	<5	<5	<5	<5	<50	5.6	<5	5.1	<5	91	790*	85	<5	960*	<5	<5	<5	<10	<5	<10	<10
11C	4/5/96	8260A	50407062	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	1500	<10
12B	4/5/96	8260A	50407056	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	160	<5	<5	<5	<5	<5	<5	<50	49	<5	<5	9.1	<5	<5	<5	<5	240*	<5	<5	<5	<10	<5	1700	<10
13A	4/5/96	8260A	50407057	6.1	<5	<5	<5	<5	27	170	140	<5	<5	<5	1400*	21	<5	<5	<5	<5	<5	<50	6.2	<5	6.2	<5	130	1100*	52	<5	260*	<5	<5	<5	<10	<5	150	<10
13C	4/5/96	NA	50407058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	970	NA
14A	4/5/96	8260A	50407059	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3600*	140	<5	<5	<5	<5	50	<50	<5	<5	<5	<5	<5	<5	8.0	<5	16	<5	<5	<5	<10	<5	580	<10
15B	4/5/96	NA	50407060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3700	NA
15E	4/5/96	8260A	50407061	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1000*	32	<5	<5	<5	<5	110	<50	1.4	<5	6.5	8.5	9.7	16	<5	<5	1300*	<5	<5	<5	<10	<5	440	<10
16A	4/6/96	8260A	50410001	<5	7.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	110	<5	<5	<5	<5	<5	210	<50	<5	<5	<5	<5	<5	6.8	<5	<5	35	12	<5	<5	<10	<5	1700	<10
17E	4/6/96	8260A	50410002	<5	7.4	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	310	<50	<5	<5	<5	18	<5	<5	8.2	<5	<5	<5	<5	<5	19	6.3	790	<10
18F	4/6/96	8260A	50410003	<5	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1300	<50	11	<5	<5	<5	12	6.2	<5	<5	<5	11	<5	<5	<10	<5	440	15
19F	4/6/96	8260A	50410004	<5	23	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.7	280	<50	17	<5	12	7.4	19	19	5.9	<5	<5	29	<5	<5	<10	<5	160	14
20E	4/6/96	8260A	50410005	<5	44	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	14	100	<50	29	<5	<5	<5	<5	<5	<5	<5	<5	30	11	<5	<10	<5	1700	14
21E	4/6/96	8260A	50410006	<5	34	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	17	880	<50	33	5.1	<5	<5	<5	<5	<5	<5	<5	31	<5	<5	<10	<5	960	18
22E	4/6/96	8260A	50410007	<5	5.9	11	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	450	<50	<5	<5	<5	6.6	<5	<5	90	<5	7.6	35	20	<5	10	<5	43	<10
23F	4/6/96	8260A	50410008	<5	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7.8	35	380	<50	28	<5	19	<5	<5	<5	5.3	<5	<5	8.5	19	<5	10	<5	1200	11
24F	4/6/96	8260A	50410009	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	610	<50	<50	<50	<50	<50	370	<50	1700	<50	<50	<50	<50	<50	<50	<50	220	<50	<50	<50	<50	<50	490	60
25E	4/6/96	8260A	50410010	<5	6.9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	260	<50	6.9	<5	<5	<5	<5	<5	<5	<5	<5	8	<5	<5	<5	<5	870	28
26E	4/6/96	8260A	50410011	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	350	<5	<5	<5	<5	<5	160	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	5.9	<5	<5	<5	<5	890	12
28D	4/7/95	8260A	50410016	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1500	<50	28	<5	<5	<5	20	8.7	<5	<5	25	<5	<5	<5	<5	<5	920	<10
28E	4/7/96	8260A	50410014	<5	34	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	18	160	<50	18	<5	<5	<5	<5	<5	<5	<5	5.6	37	17	<5	<5	<5	28	14
29A	4/7/96	8260A	50410015	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	47	<5	<5	<5	<5	<5	520	<50	<5	<5	<5	<5	<5	<5	<5	<5	390	<5	<5	<5	<5	<5	11	<10
30E	4/7/96	8260A	50410019	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	150	<5	<5	<5	<5	<5	560	<50	<5	<5	<5	<5	<5	<5	<5	<5	320	<5	<5	<5	<5	<5	<10	<10
31E	4/7/96	8260A	50410017	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	300	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1400	<10
32B	4/7/96	8260A	50410018	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	17	<5	<5	<5	<5	<5	2200	<50	32	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	4200	<10
33C	4/7/95	8260A	50410032	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3100	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1300	<10
34F	4/7/95	8260A	50410021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	150	<5	<5	<5	<5	<5	360	<50	<5	<5	<5	9	<5	<5	<5	<5	7.5	<5	<5	<5	<5	<5	<10	<10
35E	4/7/95	8260A	50410022	15	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	10	<5	350	<5	1900	<50	<5	<5	<5	6.7	<5	<5	<5	<5	<5	<5	350	<5	21	10	<10	220
36B	4/7/95	8260A	50410023	<5	<5	<5	<5	150	17	38	38	<5	<5	<5	200	<5	3.9	<5	5.2	<5	2700	<50	96	<5	<5	<5	100	72	<5	<5	1700	<5	5.2	<5	14	<5	<10	15
37E	4/7/95	8260A	50410024	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	650	14	8.4	<5	92	<5	3900	<50	<5	<5	<5	<5	58	<5	<5	<5	430	63	92	<5	28	26	170	<10
38C	4/7/95	8260A	50410025	<5	280	39	7.4	5.2	<5	12	13	<5	<5	<5	13	<5	120	<5	41	<5	530	<50	21	41	<5	8.6	<5	<5	<5	<5	370	390	250	<5	630	240	1400	33
39E	4/7/95	8260A	50410026	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	24	<5	<5	<5	12	<5	2800	<50	<5	<5	<5	<5	<5	<5	49	<5	22	<5	12	<5	9.9	<5	550	26
40D	4/7/95	8260A	50410027	<5	<5	<5	<5	610	360	2800	2600	<5	<5	<5	13	<5	12	<5	54	<5	1200	<50	<5	<5	<5	<5	560	4600	<5	<5	92	9.7	55	<5	47	11	92	50
41E	4/7/95	8260A	50410030	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	25	<5	<5	<5	<5	<5	4800	<50	<5	<5	<5	<5	130	230	18	<5	<5	<5	<5	<5	9	<5	55	27
42C	4/7/95	8260A	50410031	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	420	5.4	<5	<5	<5	<5	2,200	<50	<5	<5	<5	<5	<5	7.9	<5	<5	12	<5	<5	<5	<5	<5	<10	<10
43A	4/10/96	8260A	50411002	8.9	<5	<5	<5	<5	6.4	5.3	5.3	<5	<5	<5	<5	6.7	<5	<5	15	<5	3700	<50	<5	<5	<5	50	18	<5	<5	<5	27	15	16	<5	16	<5	<10	<10
44D	4/10/96	8260A	50411003	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6300	65	<5	<5	<5	<5	4900	<50	<5	<5	18	<5	<5	<5	<5	<5	5700	<5	<5	<5	<5	<5	55	29
45G	4/10/95	8260A	50411005	<5	<5	<5	<5	<5	<5	<5	<5	51	<5	<5	17000*	190	72	<5	160	<5	3100	<50	<5	<5	120	27	<5	<5	<5	140	1900	230	160	<5	31	44	210	110
46F	4/10/96	8260A	50411004	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1200	5.5	11	<5	19	<5	2400	<50	<5	<5	12	<5	<5	<5	<5	<5	770	9.5	19	<5	<5	<5	350	63
47B	4/10/96	8260A	50411006	5.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1400	57	9.9	<5	82	<5	4400	<50	<5	<5	<5	13	<5	<5	<5	<5	110	19	<5	<5	14	14	640	34
48C	4/10/96	8260A	50411010	<5	<5	<5	<5	17	<5	<5	<5	<5	<5	<5	1400	22	<5	<5	<5	<5	1600	<50	<5	<5	17	<5	<5	<5	<5	<5	5900	<5	<5	<5	<5	<5	<10	78
49D	4/10/96	8260A	50411008	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1300	13	<5	<5	<5	<5	1600	<50	<5	<5	<5	<5	<5	<5	<5	<5	3000	<5	<5	<5	<10	<5	13	29
51E	4/10/95	8260A	50411009	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.6	<5	<5	<5	<5	<5	820	<50	<5	<5	<5	<5	<5	<5	<5	<5	47	<5	<5	<5	<5	<5	<10	47
52B	4/10/96	8260A	50411007	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	110	9	12	<5	340	<5	950	<50	<5	<5	<5	<5	<5	<5	<5	<5	520	25	340	<5	16	6.5	230	47
53A	4/7/95	8260A	50410029	<5	16	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	170	<50	<5	<5	<5	15	<5	<5	7.7	<5	23	26	5.2	<5	10	<5	1200	31

CHRYSLER CORPORATION
KENOSHA MAIN PLANT, KENOSHA, WISCONSIN

SAMPLE I.D.	DATE COLLECTED	U.S. EPA METHOD	LAB IDENTIFICATION[b]	SAMPLE RESULTS (in micrograms per kilogram) BENZENE	n-BUTYLBENZENE	sec-BUTYLBENZENE	tert-BUTYLBENZENE	CHLOROBENZENE	1,2-DICHLOROBENZENE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	1,1-DICHLOROETHANE	1,2-DICHLOROETHANE	1,1-DICHLOROETHENE	cis-1,2-DICHLOROETHENE	trans-1,2-DICHLOROETHENE	ETHYL BENZENE	HEXACHLOROBUTADIENE	ISOPROPYLBENZENE	p-ISOPROPYLTOLUENE	METHYLENE CHLORIDE[c]	METHYL TERT BUTYL ETHER	NAPHTHALENE	n-PROPYL BENZENE	TETRACHLOROETHENE	TOLUENE	1,2,3-TRICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	TRICHLOROETHENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	VINYL CHLORIDE	m & p-XYLENE	o-XYLENE	DRO (mg/kg)	GRO (mg/kg)
54B	5/9/96	8260A	50510035	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	1100	14
55D	5/9/96	8260A	50510036	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	11	13
56A	5/9/96	8260A	50510037	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<10	<10
57A	5/9/96	8260A	50510038	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	10	6.3	<5	<5	<10	<5	10	<10
58E	5/9/96	8260A	50510039	<5	12	5.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	80	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	35	17	<5	<10	5.1	1900	31
59E	5/9/96	8260A	50510040	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	<5	<10	<5	1900	<10
60C	5/9/96	8260A	50510041	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	17	<5	<5	<5	<5	<5	9	<5	<5	<5	<5	<5	7.7	15	<5	11	<5	300	220
61A	5/9/96	8260A	50510042	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	21	21
MeOH Blank	3/30/95	NA	50403027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
MeOH Blank	5/9/96	8260A	50510043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10

...e analyte concentration was found to be outside of the established linear range of quantitation for this compound. The reported value is an approximation only.

Analysis Performed by Midwest Analytical Services, Inc., (MAS), Metropolitan Center for High Technology, 2727 Second Avenue, Detroit, Michigan 48201 (WDNR Lab Id No. 999841580).

Detected methylene chloride concentrations are not believed to be representative of actual soil samples. VOC soil samples were inadvertently packaged and shipped with DRO soil samples which had been preserved with methylene chloride. It is believed that the VOC soil samples were contaminated with methylene chloride during shipping.

- Not Analyzed

TRIAD
ENGINEERING
INCORPORATED

July 18, 1995

Mr. Rick Pager
Waste Management of Wisconsin, Inc.
W124 N8925 Boundary Road
Menomonee Falls, WI 53051

RE: Segregation of Soil within Sector 50
Chrysler Corporation - Kenosha Engine Plant - 20,000-cubic-yard Soil Pile
Kenosha, Wisconsin
Triad Project No. W943324.21

Dear Mr. Pager:

Per your request, this letter has been prepared to document the soil sampling rationale used by Triad to justify segregating the soil in Grid Sector 50. Based on available information, approximately 20,000 cubic yards of soil were generated during upgrading of assembly lines and manufacturing areas at the Chrysler Corporation (Chrysler) Kenosha Engine Plant. The source of the excavated soil is described in a letter to the Wisconsin Department of Natural Resources (WDNR) dated July 5, 1995. The letter is included as Attachment A to this letter. During field investigation activities, the stockpiled soil was divided into 61 300-cubic-yard sectors utilizing a grid. The sectors are shown in Figure 3 of Attachment A. Within each sector, a minimum of five locations were identified, flagged, and field-screened for volatile organic compounds (VOCs) using a photoionization detector (PID).

One soil sample from each sector was collected, placed into new laboratory-supplied sample jars, and submitted, following standard chain-of-custody procedures, to a Wisconsin-certified laboratory. Analyses generally consisted of VOCs (EPA Method 8260 or 8021), diesel range organics (DRO; Wisconsin Department of Natural Resources [WDNR] Modified DRO Method)), and gasoline range organics (GRO; WDNR Modified GRO Method). Several sectors which were discolored were also sampled and analyzed for Resource Conservation Recovery Act (RCRA) metals. Additional DRO samples were collected and analyzed from soil piles that had low PID results but were visibly stained or had a petroleum-like odor.

The sample was typically collected within the sector at the sample location exhibiting of the highest PID result. However, if the highest PID sample result was regularly in the same soil type, a location with a lower PID result in a different soil classification was sampled to characterize constituents associated with that soil type.

325 east chicago street
milwaukee, wisconsin 53202
414/291-8840
fax: 414/291-8841

The characterization data are summarized in Attachment A (Tables 1 and 2). After characterization, select locations were sampled and analyzed for Protocol B parameters to confirm that they are not characteristically hazardous under RCRA. Approximately 10 samples were collected from the following locations: the seven piles previously sampled for metals (4A, 8E, 19F, 35E, 40F,53A, and 50F) and the three sector samples with the highest detected trichloroethene concentrations (10G, 44G, and 48C). The samples from the sectors previously analyzed for metals were composites of four locations within each soil pile. Discrete samples were collected from the remaining piles at locations adjacent to the original sampling sites. The samples were collected at a depth of 1 to 2 feet below the pile surface to obtain representative samples. With the exception of one sample (the composite from Sector 50 which contained lead at a concentration of 12 mg/l), detected constituents are present at levels well below the landfill acceptance criteria. The sample from Sector 50 exceeded the criteria for TCLP lead.

Field observations indicate that Sector 50 contains two visually distinct soil types. Approximately one-third of the sector contains darkly stained soil. The protocol B sample was a composite of both unstained and stained soil. Triad collected a second TCLP metal sample on July 6, 1995. This sample was a composite of only the unstained soil in Sector 50. The data are included as Attachment B. The two sets of data indicate the visibly stained soil is RCRA-hazardous by characteristic, but the unstained soil is not RCRA-hazardous.

Triad, therefore, proposes to segregate the soil in Sector 50 into two portions: visibly stained soil and unstained soil. The unstained soil would be treated with the other 20,000 cubic yards of soil at the Pheasant Run Recycling and Disposal Facility. The stained soil would be disposed of at a Subtitle C facility.

If you have any further questions or comments, please contact Rick Binder or me at (414)291-8840.

Sincerely,

TRIAD ENGINEERING INC.

Ross M. Creighton
Hydrogeologist

RMC/mao
W943324\943324.21\943324-F

cc: Mr. Curt Chapman, Chrysler Pollution Prevention and Remediation
Mr. Jack Bugno, Chrysler Pollution Prevention and Remediation

MIDWEST REGION

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code: MW 28052

OK The Blue area

Proposed Management Facility: PHEASANT RUN RECYCLING & ~~DISPOSAL FACILITY~~

This form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

Decision Expiration Date: / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: CHRYSLER CORPORATION - KENOSHA ENGINE PLANT
2. SIC Code: 3711
3. Facility Address (site of waste generation): 555 30TH AVE
4. Generator City, State: KENOSHA, WISCONSIN
5. Zip/Postal Code: 53142-2800
6. State ID #: WI0050269372
7. Technical Contact: MR JOHN P. BUGNO
8. Phone: (414) 658 - 6000

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: CONTAMINATED SOILS - diesel, gasoline & Voc's (per Ross Creighton - Tetra Tech - 7-12-95, B.S.)
2. Process Generating Waste: SEE ATTACHED LETTER
3. Amount/Units: ESTIMATED 20,000 CUBIC YARDS
4. Type A ☒ Type B ☐
5. Special Handling Instructions/Supplemental Information: N/A
6. Incidental Waste Types and Amounts: N/A

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other
2. Supplemental Shipping Information: SOILS WILL BE TRANSPORTED VIA DUMP TRUCKS

D. PHYSICAL CHARACTERISTICS OF WASTE (See Instructions) (Omit for Type B)

1. Color	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F/21°C:	4. Layers	5. Specific Gravity	6. Free Liquids:
BROWN	☒ No ☐ Yes; if so, describe:	☒ Solid ☐ Semi-Solid ☐ Liquid ☐ Powder ☐ Other:	☐ Multi-layered ☐ Bi-layered ☒ Single Phased	Range 1.9 - 2.2	☐ Yes ☒ No Volume: %

7. pH: ☐ ≤2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☒ 7-10 ☐ 10- <12.5 ☐ ≥12.5 ☐ Range ☐ NA

8. Flash Point: ☐ None ☐ <140°F/60°C ☐ 140 - 199°F/60 - 93°C ☒ ≥200°F/93°C ☒ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION (Omit for Type B)

	RANGE (MIN-MAX)
1. SOILS	≥ 99 %
VOCs/DRO/GRO	< 0.5 %
METALS	< 0.5 %
	- %
	- %
	- %
	- %
	- %
	- %
Total:	100 %

The total composition must be greater than or equal to 100%. (.0001% = 1 ppm or 1 mg/l)

2. Does the waste contain any of the following? (provide concentration if known):

	NO	or	LESS THAN	or	ACTUAL
PCBs	☐		☒ < 50 ppm		ppm
Cyanides	☐		☒ < 50 ppm		ppm
Sulfides	☐		☒ < 50 ppm		ppm
Phenols	☒		☐ < 50 ppm		ppm

Printed on Recycled Paper

F. SAMPLING SOURCE (Omit for Type B) (e.g., Drum, Lagoon, Pit, Pond, Tank, Vat) _____

G. REPRESENTATIVE SAMPLE CERTIFICATION (Omit for Type B)

1. Print Sampler's Name: JEANNE M. RAMPONI 2. Sample Date: 6/21/95
3. Sampler's Title: HYDROGEOLOGIST
4. Sampler's Employer (if other than Generator): TRIAD ENGINEERING INCORPORATED

The sampler's signature certifies that any sample submitted is representative of the waste described above pursuant to 40 CFR 261.20(c) or equivalent rules.

5. Sampler's Signature Jeanne Ramponi

H. GENERATOR CERTIFICATION

By signing this profile sheet, the Generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulation.
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCB's (Polychlorinated Biphenyls).
3. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and it's epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4-D, or 2, 4, 5-TP (Silvex).
4. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1, 1, 1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, trichlorofluoromethane 1, 1-dichloroehtylene, and 1, 2-dichloroethylene at greater than 1% (10,000ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentrations of the individual compounds exceed 1% or 10,000 ppm on a weight to weight basis.
5. This sheet and the attachments contain true and accurate descriptions of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
6. The Generator has read and understands the Contractor's Definition of Special Waste included in Part B.5. of the attached instructions form. All types and amounts of special wastes provided in incidental amounts have been identified in section B.6. of this form.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20(c) or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the Contractor prior to providing the waste to the Contractor.

9. Signature John P Bugno 10. Title SITE ADMINISTRATOR/WISCONSIN OPERATIONS
11. Name (Type or Print) JOHN P. BUGNO 12. Date 7/11/95

NOTE: Omit sections D., E., F., and G., for Type B waste.

Comments: