

June 17, 1999
9-91M-12004-B

Pierce County
Department of Public Works and Utilities
Transportation Services
1420 – 112th Street E.
Tacoma, WA, 98445-3716

Attention: Pete Scarafiotti

Subject: Petroleum Impacted Soil Stockpile Sampling Results (May 1999)
Purdy Shop
13209 Goodnough Drive.
Purdy, Washington

Dear Mr. Scarafiotti:

On May 20, 1999 AGRA Earth & Environmental, Inc. (AGRA) revisited the subject site and collected five discrete soil samples from the contaminated soil stockpile. The soil samples were collected from random locations at depths ranging between 6 to 8 inches below stockpile surface. All samples were placed into prepared glass containers using dedicated nitrile gloves, and a decontaminated hand spade. Following collection samples were placed in an iced cooler, and subsequently shipped to AGRA's Portland laboratory for analysis following AGRA's chain-of-custody protocol. The laboratory analytical results are shown in Table 1.

TABLE 1 LABORATORY ANALYTICAL RESULTS							
Sample	PS-1	PS-2	PS-3	PS-4	PS-5	Soil Classifications	
						Class 2 soils	Class 3 soils
Gasoline	12(a)	22(a)	ND	32(a)	10(a)	5-100	100-250
Benzene	ND	ND	ND	ND	ND	0.005-0.5	≤0.5
Toluene	ND	ND	ND	ND	ND	0.005-40	≤40
Ethylbenzene	ND	ND	ND	ND	ND	0.005-20	≤20
Total Xylene	ND	ND	ND	ND	ND	0.005-20	≤20
Diesel	93	110	75	110	100	25-200	200-500
Fuel/Lube Oil	<100	<100	<100	<100	<100	60-200	200-2000
Notes: All concentrations are in parts per million (ppm). ND denotes non-detect. (a) = Results are quantified as gasoline, but the chromatographic pattern does not match that of the standard.							

Based on the soil analytical data, the soils at the Purdy Public Works Site are currently classified as Class 2 soils. Appropriate uses for Class 2 soils as detailed by MTCA standards include backfill at the cleanup site, fill in commercial or industrial areas, cover or fill in permitted landfills, or as a road subgrade or other road construction fill. The soils may not be placed near wetlands, surface water bodies, groundwater aquifer recharge areas, drinking water wells, or utility trenches.




AGRA recommends that a copy of this letter be submitted to both the Washington Department of Ecology and the Tacoma Pierce County Health Department. These agencies should also be notified of the final destination of the Class 2 soil stockpile. AGRA would be pleased to submit this information to these agencies if requested.

If you have any further questions or concerns please feel free to contact us at 425-820-4669.

Sincerely,


Derek B. Pulvino
Staff Scientist


Jeffrey Kasper
Project Environmental Geologist

Enclosures: Laboratory Analytical Test Certificates
Appropriate End Uses for Petroleum Contaminated Soil

DBP/JK/beh



June 2, 1999

AGRA Earth & Environmental
11335 NE 122nd Way, Suite 100
Kirkland, WA 98034

Attention: Jeffery Kaspar

Dear Mr. Kaspar:

RE: Analytical Results For Project 9-91M-12004-~~A~~ **B**

Attached are the results for the samples submitted on May 21, 1999 from the above referenced project. For your reference, our project number associated with these samples is WA990459.

The samples were analyzed at the AGRA Earth & Environmental Portland Chemistry Laboratory.

All analyses were conducted in accordance with applicable QA/QC guidelines. The results apply only to the samples submitted.

Please feel free to contact me if you have any questions regarding this report, or if I can be of any assistance in any other matter.

Respectfully submitted,

AGRA Earth & Environmental



Sean Gormley
Laboratory Manager

Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 6/1/99
Report No.: 99045905
C.O.C. No.: 5518

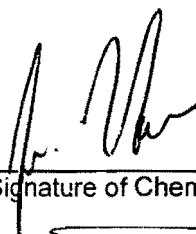
Semi-Volatile Petroleum Hydrocarbons
NWTPH-Dx
mg/kg (ppm)
Dry Weight Basis

Sample Name	Lab Code	Sample Date	Extraction Date	Analysis Date	Diesel Result	Fuel/Lube Oil Result	Surrogate Recovery O-Terphenyl
EP-1	459-1	5/20/99	5/25/99	5/28/99	230(a)	100	(b)
EP-2	459-2	5/20/99	5/25/99	5/28/99	180(a)	110	142
EP-3	459-3	5/20/99	5/25/99	5/29/99	200(a)	140	136
EP-4	459-4	5/20/99	5/25/99	5/29/99	200(a)	190	136
EP-5	459-5	5/20/99	5/25/99	5/29/99	190(a)	140	133
Lab Blank	459-MB	5/25/99	5/25/99	5/27/99	<25	<100	82

Acceptance Criteria: 50%-150%

(a) Peaks were present in the diesel range, but the chromatographic pattern suggests the possible presence of hydraulic fluid, rather than diesel.

(b) Not applicable due to the presence of interfering chromatographic peaks from elevated concentrations of target compounds which prevented determination of the surrogate.


Signature of Chemist


QA/QC Review



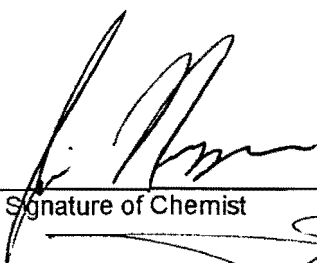
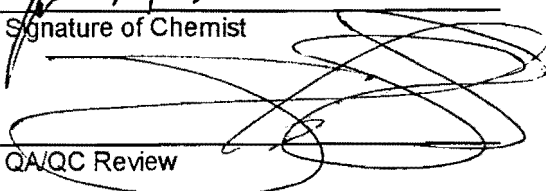
Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 6/1/99
Report No.: 99045906
C.O.C. No.: 5518

QC Data Report - Duplicate Summary
Semi-Volatile Petroleum Hydrocarbons
NWTPH-Dx
mg/kg(ppm)
Dry Weight Basis

Sample Name:	EP-1	Sample	Relative
Lab Code:	459-1	Duplicate	Percent
Diesel:	230	220	4
Fuel/Lube Oil:	100	110	10
Acceptance Limits:	~	~	<25
Sample Date:	5/20/99	5/20/99	~
Extraction Date:	5/25/99	5/25/99	~
Analysis Date:	5/28/99	5/29/99	~
Surrogate Recovery:			Control
O-Terphenyl:	(a)	148%	Limits
			50%-150%

(a) Not applicable due to the presence of chromatographic peaks from target and nontarget compounds which prevented determination of the surrogate.


Signature of Chemist

QA/QC Review

Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 5/27/99
Report No.: 990459
C.O.C. No.:

Gasoline Range Petroleum Hydrocarbons & BTEX
EPA Methods 5030/8021B and WDOE/ODEQ Method NWTPH-Gx
mg/kg(ppm)
Dry Weight Basis

Sample Name:	EP-1	EP-2	EP-3	EP-4	EP-5	Lab Blank	Method Reporting Limit
Lab Code:	459-1	459-2	459-3	459-4	459-5	459-MB	
Gasoline:	ND	ND	ND	ND	ND	ND	5.0
Benzene:	ND	ND	ND	ND	ND	ND	0.05
Toluene:	ND	ND	ND	ND	ND	ND	0.05
Ethylbenzene:	ND	ND	ND	ND	ND	ND	0.05
Total Xylenes:	ND	ND	ND	ND	ND	ND	0.15
Sample Date:	5/20/99	5/20/99	5/20/99	5/20/99	5/20/99	5/24/99	
Extraction Date:	5/24/99	5/24/99	5/24/99	5/24/99	5/24/99	5/24/99	
Analysis Date:	5/26/99	5/26/99	5/26/99	5/26/99	5/26/99	5/25/99	
Surrogate Recovery: (a,a,a-Trifluorotoluene):							AEE
Gasoline Analysis(FID):	92%	83%	85%	82%	84%	98%	Acceptance Limits
BTEX Analysis(PID):	86%	76%	78%	77%	77%	104%	57%-143%
							47%-136%

ND Not Detected

Signature of Chemist

QA/QC Review



Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 5/27/99
Report No.: 99045902
C.O.C. No.: 5518

QC Data Report
Blank Spike Recoveries
Gasoline Range Petroleum Hydrocarbons & BTEX
EPA Methods 5030/8021B & WDOE/ODEQ Method NWTPH-Gx
mg/kg(ppm)
As Received Basis

Sample Name:	Lab Blank	Spike Level	Blank Spike	Percent Recovery	Blank Spike Duplicate	Percent Recovery	Relative Percent Difference	AEE Acceptance Limits
Lab Code:	459-MB	(mg/kg)	(BS)	(BS)	(BSD)	(BSD)		
Gasoline:	<5.0	25	23(a)	92	21(a)	84	9	66%-119%
Benzene:	<0.05	1.0	0.99	99	1.0	100	1	63%-130%
Toluene:	<0.05	1.0	1.0	100	1.1	110	10	67%-122%
Ethylbenzene:	<0.05	1.0	0.97	97	1.0	100	3	67%-121%
Total Xylenes:	<0.15	3.0	3.2	107	3.4	113	6	71%-124%

Sample Date:	5/24/99	~	5/24/99	~	5/24/99	~	~
Extraction Date:	5/25/99	~	5/25/99	~	5/25/99	~	~
Analysis Date:	5/25/99	~	5/26/99	~	5/26/99	~	AEE Acceptance Limits

Surrogate Recovery (a,a,a-Trifluorotoluene):

Gasoline Analysis(FID):	94%	~	104%(a)	~	99%(a)	~	57% - 143%
BTEX Analysis(PID):	104%	~	86%	~	87%	~	47% - 136%

ND Not Detected

Spike Source: Ultra Scientific RGO-601, Lot # M-0910

Spike Source: Accustandard WA-VPH Lot # A7060438

(a) Results from blank spikes analyzed on 5/25/99.



Signature of Chemist


QA/QC Review



Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 5/27/99
Report No.: 99045903
C.O.C. No.: 5518

**QC Data Report
Duplicate Recoveries
Gasoline Range Organics
WDOE/ODEQ Method NWTPH-Gx
mg/kg(ppm)
Dry Weight Basis**

Sample Name:	EP-1	Duplicate Sample	Relative Percent
Lab Code:	459-1	(mg/kg)	Difference
Gasoline:	<5.0	<5.0	(a)

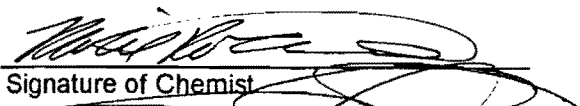
Acceptance Limits: ~ ~ <25

Sample Date:	5/20/99	5/20/99	~
Extraction Date:	5/24/99	5/24/99	~
Analysis Date:	5/26/99	5/26/99	AEE

Surrogate Recovery:			Acceptance Limits
a,a,a-Trifluorotoluene:	92%	95%	57%-143%

(a) Not applicable when sample concentration is less than the method reporting limit.

ND Not Detected


Signature of Chemist


QA/QC Review



Project: Elk Plain Shop
Project No.: 9-91M-12004-A
Project Manager: Jeff Kaspar
Sample Matrix: Soil

Service Request No.: WA990459
Report Date: 5/27/99
Report No.: 99045904
C.O.C. No.: 5518

QC Data Report
Matrix Spike Recoveries
BTEX Compounds
EPA Methods 5030/8021B
mg/kg(ppm)

Sample Name:	EP-1	Spike Level	Matrix Spike	Percent Recovery	Matrix Spike Duplicate	Percent Recovery	AEE % Recovery Acceptance Limits	Relative Percent Difference (RPD)
Lab Code:	459-1	(mg/kg)	(MS)	(MS)	(DMS)	(DMS)		
Benzene	<0.05	1.0	0.91	91	0.90	90	59%-124%	1
Toluene	<0.05	1.0	0.93	93	0.92	92	62%-120%	1
Ethylbenzene	<0.05	1.0	0.89	89	0.88	88	54%-125%	1
Total Xylenes	<0.15	3.0	2.9	97	2.9	97	56%-130%	<1
Sample Date:	5/20/99	~	5/20/99	~	5/20/99	~	~	
Extraction Date:	5/24/99	~	5/24/99	~	5/24/99	~	~	
Analysis Date:	5/26/99	~	5/26/99	~	5/26/99	~	~	
							AEE Acceptance Limits	
Surrogate Recovery:								
a,a,a-Trifluorotoluene:	86%	~	79%	~	80%	~	47% - 136%	
4-Bromofluorobenzene:	93%	~	84%	~	83%	~	66% - 120%	

ND Not Detected

Spike Source: Accustandard WA-VPH Lot # A7060438

Signature of Chemist

QA/QC Review



**AGRA Earth & Environmental Portland Chemistry Laboratory
Sample Receipt Documentation Form**

Project: <u>EIK Placer Shop</u>	Cooler Temperatures	
SR No.: _____		
Date: <u>5/21/99</u>		
Time: <u>10:35</u>		
Temperature of Cooler Upon Receipt (Record to the Right):		
Received By: <u>[Signature]</u>	3.8	4.8
	3.1	
	3.7	5.3

Section One: Shipping/Delivery Issues

1. Method of Sample Delivery: <u>UPS</u>			
2. Airbill or Courier Receipt Number: <u>128E12560140886066</u>			
3. Is a copy of the airbill or courier receipt available to be placed in the job file?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA

Section Two: Sample Custody Issues

4. Are custody seals on the shipping container intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA
5. Is a COC or other sample transmittal document present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA
6. Is the COC complete?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA
7. Are the sample seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA
8. Does the COC match the samples received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA

Section Three: Sample Integrity Issues

9. Are all sample containers intact and not leaking?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
10. Are all samples preserved properly?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA
11. Are all samples within holding time for the required tests?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
12. *Were all samples received at the proper temperature?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
13. Are samples for volatiles and other headspace sensitive parameters free of headspace or bubbles?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA

Section Four: Sample Containers Received:

14. 4 oz. glass jars: <u>10</u>	19. 2oz. amber (MeOH):
15. 8 oz. glass jars: <u>10</u>	20. Encore samplers:
16. 40ml VOA vials:	21. 500ml plastic:
17. 1 liter glass:	22. 1liter plastic:
18. Other (describe):	

*Temperatures for: water and soil samples = 4°C-6°C, MeOH jars = 25°C, air = not required

Reviewed By:

[Signature]
Laboratory Manager or Designee



PROJECT		REPORT TO:		PROJECT MANGER		SAMPLER'S NAME (please print)		SAMPLER'S SIGNATURE		PROJECT No.		PHONE No.		PHONE No.		PHONE No.		ANALYSIS REQUESTED (circle, check box or write preferred method in box)											
Elk Plain Shop		Derek Pulvino		Jeff Kasper		Derek Pulvino		<i>[Signature]</i>		9-91M-12004-A		405-820-4669		Same		Same		<div style="display: flex; justify-content: space-between;"> <div>BTEx by EPA 602 / 8021</div> <div>TPH-G</div> <div>BTEx / TPH-G</div> <div>TPH-HClD</div> <div>TPH-D / TPH-D EXTENDED</div> <div>TPH by EPA 8015 MODIFIED / 8015B</div> <div>TPH-418.1 MODIFIED</div> <div>TPH by EPA 418.1</div> <div>GC / MS EPA 624 / EPA 8260 Volatiles</div> <div>GC / MS EPA 625 / 8270 Semi-volatiles</div> <div>VOCs EPA 601 / 602 or EPA 8021</div> <div>PCBs EPA 608 / 8081 / 8082</div> <div>LEAD EPA 6010 / EPA 7421 Total / Dissolved</div> <div>TOTAL METALS</div> <div>TCLP</div> </div>											
SAMPLE I.D.		DATE	TIME	MATRIX	PRESERVATIVE	CONTAINERS																							
						No.	VOL.																						
1. EP-1		5-20	11:04	Soil	4°C	2	402 gal 100m																						
2. EP-2		↓	11:07	↓	↓	↓	↓																						
3. EP-3		↓	11:14	↓	↓	↓	↓																						
4. EP-4		↓	11:20	↓	↓	↓	↓																						
5. EP-5		↓	11:25	↓	↓	↓	↓																						
6.																													
7.																													
8.																													
9.																													
10.																													

SAMPLE RECEIPT		LABORATORY		TURNAROUND TIME		QC Reporting Requirements (Add'l charges may apply)		COMMENTS / INSTRUCTIONS	
TOTAL # CONTAINERS 10		SHIPPING I.D. / AIRBILL #		<input type="checkbox"/> 8 HOUR		<input type="checkbox"/> LEVEL I			
CONDITION OF CONTAINERS Good		CARRIER		<input type="checkbox"/> 24 HOUR		<input type="checkbox"/> LEVEL II			
CONDITION OF SEALS		DOT DESIGNATION		<input checked="" type="checkbox"/> 1 WEEK		<input type="checkbox"/> LEVEL II w/project specific Duplicates/Spikes			
				<input type="checkbox"/> 2 WEEK (standard)		<input type="checkbox"/> Level III (Full validation package)			
				<input type="checkbox"/> OTHER _____					
RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME		
1. Derek Pulvino / Agra		May 16/99	3:25	1.					
2.				2.					
3.				3.					

PAGE 1 OF 2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

TABLE V. END USE CRITERIA FOR PETROLEUM-CONTAMINATED SOILS

Analyte	Analytical Method	Soil Class (ppm)			
		1	2	3	4
Heavy fuel hydrocarbons (C24-C30)	WTPH-418.1 mod.	<60	60-200	200-2000	>2000
Diesel (C12-C24)	WTPH-D	<25	25-200	200-500	>500
Gasoline (C6-C12)	WTPH-G	<5	5-100	100-250	>250
Benzene	8020	<0.005	0.005-0.5	≤0.5	>0.5
Ethylbenzene	8020	<0.005	0.005-20	≤20	>20
Toluene	8020	<0.005	0.005-40	≤40	>40
Xylenes (total)	8020	<0.005	0.005-20	≤20	>20

Treatment is recommended for all Class 3 and 4 soils.

NOTES:

Class 1 Soil Uses:

Any use which will not cause threat to human health or the environment.

Class 2 Soil Uses:

Backfill at the cleanup site

Fill in commercial or industrial areas

Cover or fill in permitted landfills

Road subgrade or other road construction fill

Fill in or near: wetlands, surface water, ground water, drinking water wells or utility trenches is NOT recommended. Use as residential topsoil is also NOT recommended.

Class 3 Soil Uses:

Treatment

Disposal at the original site (no solid waste disposal permit needed)

Road construction (no solid waste disposal permit needed)

Use or disposal in permitted, municipal landfills

Permitted as a new PCS landfill

(An evaluation should be made to ensure that disposal will not cause a threat to human health or the environment, e.g. use near water bodies)

Class 4 Soil Uses:

Treatment

Disposal in a permitted, municipal landfill

Permitted as a new PCS landfill

4.4 RECORDKEEPING

Detailed records should be kept on treatment and disposal/placement of all PCS. Because the MTCA assigns liability to owners and operators of properties/facilities, these records are necessary to provide information concerning the treatment and final disposition of these soils. Items 1-8 should be documented prior to treatment. Items 9-10 are documented after treatment and disposal.

Specific items that should be documented include:

1. Origin owner and address of contaminated soil;
2. Owner name, address and phone number;
3. Engineering consultant name, project manager, address and phone;
4. Type of facility (e.g., gas station, spill);
5. Total volume of contaminated soil;
6. Type(s) and concentration of contaminant originally in soil (include analytical results from lab);
7. Name, address and contact name of firm providing treatment;
8. Type of treatment (e.g., bioremediation, thermal desorption, soil venting, asphalt incorporation);
9. Final concentrations of contaminants in soil (include analytical results from the lab); and
10. Final disposition of soil including address, property owner and operator, exact location of soil with map showing placement and depth.