February 8, 2021

Peter Ramanauskas U.S. EPA Region 5 77 West Jackson Blvd. Chicago, Illinois 60604-3590

Dear Mr. Ramanauskas:

Re: RCRA Corrective Action Administrative Order on Consent (AOC)
Progress Report 79, Fourth Quarter 2020 (Revision 1)
GM GPS – Bedford Facility, ID 006036099, Docket No. RCRA 05 2017 0011
Bedford, Indiana

This Progress Report is submitted by General Motors LLC (GM) in accordance with the GM Bedford Casting Operations (BCO) Facility Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent (AOC – United States Environmental Protection Agency [U.S. EPA] Docket No. RCRA 05-2014-0011), executed on August 4, 2014. This report covers the period of the fourth calendar quarter of 2020 for the RCRA Corrective Action (CA) Project at the GM BCO – Bedford Facility (Facility) and select surrounding properties (Site), Bedford, Indiana.

The next RCRA progress report covering the first quarter of 2021 will be submitted on or before April 15, 2021.

1. List of Completed Activities

The following activities took place and the following documents were prepared and distributed during this quarter:

- 1. The Groundwater Treatment Plant (GWTP) collected and treated water from the Pilot Trench, Vault sumps, and wet wells during the fourth quarter of 2020. An estimated 0.06 pounds of PCBs were removed during the quarter through collection and treatment of the groundwater. A summary of the volumes and sample results used for this calculation is provided in Table 1. Operational and compliance samples were collected monthly. Monthly discharge monitoring reports have been submitted to the State of Indiana in conformance with the National Pollutant Discharge Elimination System (NPDES) Permit Number IN0064424. A total of 6,507,467 gallons of treated groundwater were discharged.
- 2. Absorbent socks were removed and replaced from CH-5A and MW-X209Y053 in November and December 2020. Table 2 summarizes oil removal (based on disposal weights) from the AOI-8 area.
- 3. Oil collection from CH-2A (solar sipper) was on-going during the quarter. Approximately 20 gallons of oil have been collected. Field staff monitor the system monthly to maximize efficiencies.



- 4. Additional angle monitoring wells were installed during the first week of October 2020 in support of the Pilot Trench monitoring.
- 5. U.S.EPA submitted comments on the Spring 018 Interim Measure Completion Memo on September 29, 2020. Responses were submitted on October 1, 2020.
- 6. A summary of the Solar Sipper examination by the supplier technician was submitted to U.S. EPA on October 9, 2020.
- 7. Progress Report 78 covering the third quarter of 2020 was submitted to U.S. EPA on October 15, 2020.
- 8. A summary of the Leak Detection System (LDS) pump replacement activities was submitted to U.S. EPA on October 16, 2020.
- 9. U.S. EPA provided additional comments on the 2019 Annual Vault Report on October 28, 2020
- 10. The NPDES permit renewal application was approved by IDEM on October 29, 2020 and a new permit was issued. The effective date of the permit is February 1, 2021.
- 11. The dye trace study to monitor the Pilot Trench began. Background testing was conducted in October and November 2020. Nearfield dye injection occurred on December 2, 2020. Trace dye was observed to be leaking into a storm water catch basin on the northside of the East Plant Area cover system and discharging into Tributary 3. Mitigation of the discharge was implemented. Nearfield daily monitoring was completed in December 2020. Nearfield weekly monitoring began in December 2020 and continues in January 2021.
- 12. During the week of November 1, 2020, pumping of groundwater in the gravel underdrain system (GUS) was attempted using a slim pump inserted into the 3-inch diameter pipe within the sump. Approximately 2.5 gallons of water was removed. Water was attempted to be removed again on November 17, 2020, but no water was in the pipe.
- 13. During the week of November 1, 2020, cleanout inspections for the GUS, Leak Collection System, and Pilot Trench were conducted.
- 14. U.S. EPA provided comments on the CA750 Report for the First Half of 2020 on November 4, 2020.
- 15. U.S. EPA provided comments on the Spring 018 IM Completion Memo on November 10, 2020.
- 16. The 2021 Financial Assurance cost estimate was submitted to U.S. EPA on November 11, 2020.
- 17. The Proposed Adaptive Management Approach for the Corrective Measures Proposal was submitted to U.S. EPA on November 13, 2020.
- 18. The revised 2019 Annual Vault Report was submitted to U.S. EPA on November 17, 2020.
- 19. U.S. EPA provided comments on the Financial Assurance Cost Estimate on November 17, 2020. A call was held between U.S. EPA, GM and GHD on November 13, 2020 to review the comments. Initial responses to comments was sent to U.S. EPA on November 24, 2020. U.S.EPA provided additional comments on December 8, 2020.
- 20. El CA750 groundwater static measurements and sampling event was conducted in November 2020.
- 21. The semi-annual cap inspection was conducted November 20-21, 2020. A copy of the field inspection form is provided in Attachment 1. Field staff noted grasses were in excess of 4 feet in some areas. Samplings were removed where encountered. Animal burrows were



- inspected. In general, animal burrows extended between 6 and 12 inches below grade. The burrows did not appear to be active. Burrows were filled with clean soil where encountered.
- 22. U.S. EPA provided additional comments on the RFI Addendum on December 9, 2020.
- 23. Fact Sheet 48 was distributed to the public, IDEM and U.S. EPA on December 22, 2020.
- 24. On-site tailgate meetings for the reporting period were held daily, during field activities, to discuss safety and project scope.

2. Summaries of Problems and Planned Resolutions

GM identified a 3-inch galvanized pipe in the GUS sump that could be used as a groundwater extraction point. In November 2020, GHD used a slim pump inserted into the 3-inch pump to remove water. The pump was set approximately 1 foot off the bottom of the sump. During the initial pumping, about 2.5 gallons of water was removed. The water was clear. After leaving the sump overnight, field crews attempted to remove more water. A water level tape was inserted to record the initial water level – no water was encountered. Field crews returned to the GUS approximately 2 weeks later and the 3-inch pipe continued to be dry.

GHD hypothesizes that over time, sediment has built up in the bottom of the sump, effectively creating a seal at the base of the 3-inch pipe. GHD is in discussion with drilling contractors to determine the feasibility of injecting air into the pipe to mobilize the sediment, thus allowing removal. If successful, further pump testing within the 3-inch pipe can be conducted. Field work is anticipated for February 2021.

Mass PCB removal from the AOI-8 area was first reported in Quarterly Progress Report 71 (Fourth Quarter 2018). PCB mass removal calculations used PCB sample data from the April 19, 2014 waste characterization sampling event. In January 2021, U.S.EPA questioned using data from other sampling events for the mass removal calculations. During the January monthly call with U.S.EPA, GM, and GHD, it was agreed that an average PCB concentration (by well) would be used for the PCB mass removal calculations. Upon pulling historical oil sampling data, GHD found an error in previous reporting where the PCB concentrations attributed to CH-5 and CH-2A were inadvertently switched. PCM mass removal volumes shown in Table 2 of this report (Quarterly Progress Report 79) corrects this error.

3. Projected Work for the Next Reporting Period

Work anticipated for the next reporting period, based on GM's proposed suspended or deferred project tasks includes:

- 1. Continue OMM for the GWTP.
- 2. Continue GWTP discharge reporting under the NPDES permit.
- 3. Collect monthly transducer data from the pilot trench monitoring locations.
- 4. Continue dye tracing study.
- 5. Submit the quarterly progress report.
- 6. Provide responses to U.S. EPA comments on the Financial Assurance cost estimate.



- 7. Submit the Clarifier NAPL Recovery Assessment plan for U.S. EPA review.
- 8. Submit the Focused Corrective Measures Study report for the final trench alignment.
- 9. Submit the summary for the Million Gallon Tank (MGT) area liner installation.
- 10. Submit responses to U.S. EPA comments on the CA750 summary for the first half of 2020.
- 11. Submit responses to U.S. EPA comments on the Spring 018 Interim Measure Completion memo.
- 12. Submit the EI CA750 sampling summary memo for the second half of 2020.
- 13. submit the Parcel 400 and 430/431 Construction Completion reports
- 14. Submit responses to U.S. EPA comments on the RFI Addendum.
- 15. Submit responses to U.S. EPA comments on the Adaptive Management Approach for the Corrective Measures Proposal.
- 16. Implement the Clarifier NAPL Recovery Assessment plan.
- 17. Remove oil from the solar sipper unit for off-site disposal.
- 18. Provide bond for financial assurance.
- 19. Develop GUS sump to remove sediment.
- 20. Provide cleanout inspection summary memo.
- 21. Collect first quarter 2021 static water levels.
- 22. Provide U.S. EPA and IDEM project updates via emails and/or telephone calls.

Please feel free to call me at 313-506-9465 if you have any questions concerning this information or otherwise regarding the Bedford GM LLC Project.

Sincerely,

Ed Peterson

Project Manager, Eco-Restorers GM Sustainable Workplaces

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Encl.

cc: Daniel Haag; U.S. EPA Chris Myer; IDEM

> Ed Peterson; General Motors Nathan Milliman; General Motors John Maher; General Motors

Katie Kamm; GHD Julie Luzwick; GHD Bill Steinmann; GHD Francis Ramacciotti; GHD



Table 1

GWTP PCB Mass Removal Estimate GM Bedford GPS Facility Bedford, Indiana

	Groundwater Treatment Plant (GWTP) Treated Volume (gallon)	PCB Influent Concentration ⁽¹⁾ (μg/L)	Mass PCB Treated ⁽²⁾ (pound)
January 2019	5,467,881	0.71	0.032
February 2019	5,393,116	ND	0.000
March 2019	4,916,870	0.92	0.038
April 2019	5,547,708	1.5	0.069
May 2019	3,670,000	1.3	0.040
June 2019	5,542,417	1.2	0.056
July 2019	1,743,512	1.6	0.023
August 2019	930,385	1.1	0.009
September 2019	753,569	1.6	0.010
October 2019	977,015	1.5	0.012
November 2019	2,104,042	2.2	0.039
December 2019	3,099,964	1.4	0.036
January 2020	4,690,161	0.68	0.027
February 2020	3,642,899	1.1	0.033
March 202	4,853,095	0.96	0.039
April 202	2,681,548	1.4	0.031
May 2020	3,767,813	1.2	0.038
June 2020	2,295,164	0.96	0.018
July 2020	1,465,351	1.6	0.020
August 2020	2,109,119	0.89	0.016
September 2020	822,061	1.5	0.010
October 2020	1,663,537	1.24	0.017
November 2020	2,798,824	1.1	0.026
December 2020	2,045,106	1.1	0.019

Total Estimated Volume of Water Treated, Fourth Quarter 2020 (gallons)	6,507,467
Total Estimated Mass of PCB Treated, Foruth Quarter 2020 (pounds)	0.06
Total Estimated Mass of PCB Treated, Since January 2019 (pounds)	0.66

Notes:

PCB concentration based on an average of parent and duplicate sample, if duplicate sample was collected

Mass removed = $\frac{treated\ volume\ (gallons)x\ PCB\ concentration}{453.59\ x\ 1,000,000}$

Table 2

AOI-8 Oil Removal
GM Bedford GPS Facility
Bedford, Indiana

		Oil Mass	PCB Content	PCB Mass
Date	Well	(lbs)	(mass %)	(lbs) ¹
10/31/2018	CH-5	2.16	11%	0.24
11/5/2018	CH-5	2.28	11%	0.25
11/23/2018	CH-5	2.09	11%	0.23
12/4/2018	CH-5	2.81	11%	0.31
1/9/2019	CH-5	2.22	11%	0.24
1/23/2019 2/11/2019	CH-5 CH-5	2.16 2.3	11% 11%	0.24 0.25
2/11/2019 2/26/2019	CH-5 CH-5	2.3 2.33	11%	0.25
3/7/2019	CH-5	2.18	11%	0.24
3/18/2019	CH-5	2.29	11%	0.25
4/1/2019	CH-5	2.39	11%	0.26
7/15/2019	CH-5	2.85	11%	0.31
7/31/2019	CH-5	1.88	11%	0.21
8/22/2019	CH-5	1.1	11%	0.12
11/20/2019	CH-5	1.2	11%	0.13
12/17/2019	CH-5	2.5	11%	0.27
1/20/2020	CH-5	3	11%	0.33
2/13/2020	CH-5	2	11%	0.22
4/24/2020	CH-5	1.5	11%	0.16
7/16/2020	CH-5	1.25	11%	0.14
8/12/2020	CH-5	2.75	11%	0.30
9/24/2020	CH-5	2	11%	0.22
11/19/2020	CH-5	2	11%	0.22
12/21/2020	CH-5	3	11%	0.33
Total PCB Removed fi	rom CH-5 (LNAPL) ³			5.70
3/25/2019	MW-X209Y053	24.21	40%	9.68
7/15/2019	MW-X209Y053	2.45	40%	0.98
7/31/2019	MW-X209Y053	1.98	40%	0.90
8/22/2019	MW-X209Y053	1.1	40%	0.44
1/20/2020	MW-X209Y053	2.1	40%	0.84
2/13/2020	MW-X209Y053	1	40%	0.40
4/24/2020	MW-X209Y053	1	40%	0.40
7/16/2020	MW-X209Y053	1.0	40%	0.40
9/24/2020	MW-X209Y053	1.6	40%	0.62
11/19/2020	MW-X209Y053	1.0	40%	0.40
12/21/2020	MW-X209Y053	2.8	40%	1.10
	rom MW-X209Y053 (DNAP			16.06
3/28/2019	CH-2A (solar sipper)	74.03	58%	42.94
Total PCB Removed fi	rom CH-2A (DNAPL) ^{2,5}			42.94

Notes:

PCB weight based on average of analytical data

Location	Sample Date	PCB (mg/kg)	Average (mg/kg)
	9/19/2005	224,500	
CH-5	8/16/2011	89,700	109,067
	4/9/2014	13,000	
MW-X209Y053	9/19/2006	400,000	400,000
CH-2A	11/5/2008	380,000	580,000
CH-ZA	4/9/2014	780,000	360,000

PCB weight from solar sipper and the initial removal from MW-X209Y053 (3/25/2019) is based on an approximate gallons of oil removal. DNAPL density of 1.16 g/cc used when converting volume (gallons) to mass (pounds). Density value determined by laboratory analysis from the 4/19/2014 CH-2A sampling event.

³ CH-5 Mass Sock net weight (lbs)x 109,067(mg/kg)

(lbs)= 1,000,000 (mg/kg)

MW-X209Y053 Sock net weight (lbs)x 400,000 (mg/kg)

Mass(lbs) = 1,000,000 (mg/kg)

3/25/2019 mass removal calculated based on removal of 2.5 gallons of NAPL

⁵ CH-2A Mass <u>Liquid weight (lbs)x 580,000 (mg/kg)</u>

(lbs) = 1,000,000 (mg/kg)

Attachment 1 Cover System Inspection Forms

	CHECKED		
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Inspector:	 	Temperature:	
Date of Inspection:		Weather:	

1	TYPES OF PROBLEMS	NO PROBLEMS	CHECKED CORRECTIVE ACTION	DETAILED ACTIONS REQUIRED	NOTES	DATE AND NATURE OF ACTION COMPLETED
		NO PROBLEMS	REQUIRED			
TATED SOIL COVE	ER SYSTEM					
Transect EV1	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect EV2	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
1	- ROOTING OF TREES	1				

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TEM				DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
EGETATED SOIL COVE						
Transect EV3	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect EV4	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect EV5	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES	+				

	TYPES OF PROBLEMS	(CHECKED	DETAILED ACTIONS DECUMED	NOTES	DATE AND NATURE OF ACTIONS
ITEM	1 TPES OF PROBLEMS	NO PROBLEMS	CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
VEGETATED SOIL COVI	ER SYSTEM (CONTINUED)					
Transect EV6	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect EV7	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect EV8	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					

М	TYPES OF PROBLEMS	NO PROBLEMS	CHECKED CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	DATE AND NATURE OF ACTIONS COMPLETED
TATED SOIL COVE	ER SYSTEM (CONTINUED)		REQUIRED			
Transect EV9	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING					
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect WV1	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EXPPOSURE OF LINER					
	- EROSION					
	- LOCALIZED SETTLEMENT/SLUMPING		_			
	- PONDING OF WATER/DRAINAGE					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES	1				

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ITEM	TYPES OF PROBLEMS	NO PROBLEMS	CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED	
HARD SURFACE COVE	R SYSTEMS						
Transect EA1	- QUALITY OF ASPHALT COVER						
	- PRESENCE OF CRACKING OR DISCOLORATION						
Transect EA2	- QUALITY OF ASPHALT COVER						
	- PRESENCE OF CRACKING OR DISCOLORATION						
Transect WA1	- QUALITY OF ASPHALT COVER						
	- PRESENCE OF CRACKING OR DISCOLORATION						
ACCESS ROAD							
ACCESS ROAD	- EROSION						
	- OBSTRUCTIONS/DEBRIS						
	- POTHOLES						
	- DAMAGE CAUSED BY VEHICULAR TRAFFIC						

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EIVI				DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
VALE/DRAINAGE DI	<u>rches</u>					
Transect ES1	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES2	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES3	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					

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ТЕМ	TYPES OF PROBLEMS	(CHECKED	DETAILED ACTIONS REQUIRED	NOTES	DATE AND NATURE OF ACTIONS
IEIVI	TIPES OF PROBLEMS		CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
VALE/DRAINAGE DIT	CHES (CONTINUED)					
Transect ES4	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES5	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES6	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					

	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS BEOLUBED	NOTES	DATE AND NATURE OF ACTIONS
M		NO PROBLEMS	CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
ALE/DRAINAGE DI	TCHES (CONTINUED)					
Transect ES7	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES8	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES9	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					

	TYPES OF PROBLEMS	CHECKED				DATE AND NATURE OF ACTIONS
ITEM		NO PROBLEMS	CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
WALE/DRAINAGE DIT	CHES (CONTINUED)					
Transect ES10	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES11	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES12	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES	†	<u> </u>			

	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS DECLUDED	NOTES	DATE AND NATURE OF ACTIONS
М		NO PROBLEMS	CORRECTIVE ACTION REQUIRED	DETAILED ACTIONS REQUIRED	NOTES	COMPLETED
LE/DRAINAGE DIT	rches (continued)					
Transect ES13	- QUALITY OF VEGETATIVE COVER - LENGTH OF GRASS - DEAD/DYING GRASS - GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION					
	- OBSTRUCTIONS					
	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					
Transect ES13 ES14	- GRASS COVERAGE - NOXIOUS WEEDS					
	- EROSION - OBSTRUCTIONS					
l l	- CULVERT/CATCH BASIN - OBSTRUCTIONS - SEDIMENT ACCUMULATION					
	- SIGNS OF BURROWING BY ANIMALS					
	- ROOTING OF TREES					