

p. "Respondent" shall mean General Motors Corporation, a Delaware corporation.

q. "Section" shall mean a portion of this Order identified by a Roman numeral.

r. "Site" shall mean the area described as such in Paragraph 1 and depicted generally on the attached Figure 1.

s. "State" shall mean the State of Indiana.

t. "TSCA" shall mean the Toxic Substances Control Act, as amended, 15 U.S.C. §§ 2601, *et seq.*

u. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any PCB remediation waste as defined in 40 C.F.R. §§ 761.3 and 761.50(b)(3)(i) and IDEM Rule 329 IAC 4.1-4-1.

v. "Work" shall mean the activities Respondent is required to perform under this Order.

IV. FINDINGS OF FACT

Based on available information, including the Administrative Record in this matter, EPA hereby finds that:

8. The Plant is located at 105 GM Drive, Bedford (Lawrence County), Indiana, 47421. It comprises 152.5 acres of land, including buildings covering 915,000 square feet of operating floor space.

9. Several unnamed tributaries of Bailey's Branch Creek flow from the Plant property. On the east side of the Plant property, an unnamed tributary originating at Outfall 002 flows into Bailey's Branch Creek. Bailey's Branch Creek, in turn, flows into Pleasant Run, which empties into Salt Creek. Flow from the Plant property supplies approximately 100 percent of the dry

weather flow in this unnamed tributary of Bailey's Branch Creek beginning at Outfall 002. On the north side of the Plant property, Former Outfall 001 discharged into an unnamed tributary of Bailey's Branch Creek. On the northeast side of the Plant property, Outfall 003 may discharge to an unnamed tributary of Bailey's Branch Creek during episodic lagoon overflow events.

10. Residential properties border the unnamed tributaries of Bailey's Branch Creek, Bailey's Branch Creek and Pleasant Run downstream from the Plant.

11. GM operated the Plant from 1942 until 1946 for the United States. GM purchased the Plant from the United States in 1946. It has owned the Plant since that time, operating it primarily as an aluminum foundry for casting automotive parts such as transmission casings, pistons and engine blocks.

12. In 1965, GM began using Pydraul 312, a hydraulic fluid containing PCBs, at the Plant in various die casting machines. Prior to this, the Plant utilized a water-based hydraulic fluid which did not contain PCBs.

13. In 1966, in order to collect hydraulic fluids that were leaking from the die casting machines at the Plant, GM instituted a reclamation program wherein hydraulic fluid that leaked from the die casting machines was collected in a service tunnel system and then flowed by gravity to unlined, wastewater lagoons on the Plant property. From the lagoons, the fluid was recovered and reclaimed.

14. At various times, PCB oils were carried with the discharge from the Plant's wastewater lagoons to Outfall 002 leading into Bailey's Branch Creek via an unnamed ditch.

15. In 1972, the Plant switched to Pydraul 312A, a phosphate ester-based hydraulic fluid thought to be non-PCB containing. However, GM subsequently discovered that Pydraul 312A contained residual levels of PCBs. In September of 1972, the Plant switched to the use of Pydraul 65E hydraulic fluid which did not contain any PCBs.

16. Following approval from the Indiana Stream Pollution Control Board ("ISPCB") and Indiana State Board of Health in January 1973, Respondent constructed a primary wastewater treatment plant ("WTP") at the Plant to collect and treat wastewater contaminated with hydraulic fluid from the Plant. Since then, the WTP has been upgraded with additional treatment capability including biological treatment, carbon polishing and other treatment systems. By 1976, the old wastewater lagoon system was removed from service.

17. In 1977, a PCB study conducted for GM by Camp, Dresser & McKee found PCB levels in water in Bailey's Branch Creek downstream from the Plant at 55 parts per billion ("ppb") and 21 ppb. One sample of stream sediments in Pleasant Run Creek downstream from its confluence with Bailey's Branch showed PCBs at 800 parts per million ("ppm").

18. In 1979, GM submitted to the ISPCB analytical results for water/oil mixture samples from a spring on the Plant property near the WTP. Respondent recorded levels of 1.5 ppm to 1,453 ppm PCBs in water/oil mixture samples collected from the spring over a period from 1976 to 1979.

19. On October 21, 1980, GM entered into a Stipulation and Consent Order with ISPCB, Cause No. B-416, pursuant to which GM agreed to implement various measures to treat and reduce PCBs contained in the effluents from Former Outfall 001 and Outfall 002 and to undertake certain studies of watercourses downstream of those outfalls.

20. In 1981, a second PCB study conducted for GM by Camp, Dresser & McKee collected 664 small fish from Pleasant Run and Salt Creek. A total of 19 of these fish were submitted for PCB tissue analyses. All of the fish sampled, except for those collected upstream from the Plant, contained PCB levels exceeding the 5 ppm tolerance limit for fish and shellfish established by the federal Food and Drug Administration at the time of the study.

21. In 1989, a Compliance Sampling Inspection of the Plant conducted by IDEM found PCBs in sediments in the unnamed ditch

connecting Outfall 002 to Bailey's Branch, in Bailey's Branch itself, in Pleasant Run Creek downstream from the Bailey's Branch confluence, and in Salt Creek.

22. Effective March 20, 2001, the Parties entered into a Voluntary Corrective Action Agreement for the Plant and amended this agreement on October 1, 2002 (collectively "Agreement"). As part of the work it performed under the Agreement, GM sampled soils, sediments, surface water, springs, and seeps on properties adjacent to the unnamed tributaries, Bailey's Branch Creek, and Pleasant Run in residential and undeveloped areas downstream from the Plant. GM found PCB levels in soils ranging from non-detect up to 9,900 ppm, with a mean of 18.5 ppm; in sediments ranging from non-detect up to 25,000 ppm, with a mean of 207 ppm; in springs ranging from non-detect to 1.2 ppb total PCBs, with an average of 0.051 ppb, and all non-detect for dissolved PCBs; and in seeps ranging from an estimated 0.51 ppb up to 180 ppb total PCBs, with an average of 75.63 ppb, and from non-detect to 51 ppb dissolved PCBs, with an average of 12.2 ppb.

23. On May 24, 2002, GM submitted the draft RCRA Corrective Action Parcel 22 Interim Measure Workplan to EPA for review and approval. This workplan described the procedures to be used in the remediation of this property, located near where Bailey's Branch Creek crosses Broomsage Road. After modification by GM to address EPA's comments, EPA approved this workplan on July 23, 2003 ("Parcel 22 Workplan") (Appendix 3).

24. A small amount of PCB-contaminated oil was observed on May 9, 2002 from an underground spring on one resident's property within the Site near Outfall 002 following a significant rain event. The oil was collected, removed and disposed of by GM. As interim measures, in May of 2002, GM installed a dam, booms and a bypass system to isolate the spring and on June 15, 2002 GM completed installation of a collection system to collect the oil from the spring. Thereafter, GM periodically inspected the collection system until access to do so was denied by the property owner in September of 2002.

25. On October 8, 2002, Respondent submitted the draft RCRA Corrective Action Upstream Parcels Interim Measure Workplan to

EPA for review and approval. This workplan, as subsequently modified by Respondent, described the procedures to be used in the remediation of Parcels 401, 215 and 216 and the unnamed tributary of Bailey's Branch Creek located on such parcels; the area of said unnamed tributary located on the East Plant Area and the ditch located on the East Plant Area from Outfall 003 to its terminus on Parcel 215; and Parcels 205, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 and the unnamed tributary of Bailey's Branch Creek located on such parcels. After modification by GM to address EPA's comments, EPA approved this workplan on July 23, 2003 ("Upstream Workplan") (Appendix 4).

26. GM has pursued work under the Agreement, including determining the nature and extent of hazardous substances in sediments and soils at the Site and conducting corrective actions necessary to remediate PCB contamination at the Site, but has not been able to complete the work at the Site contemplated by the Agreement due to circumstances beyond its control, i.e., denial of access by affected property owners.

27. In July, 2003, the Director of the Superfund Division, EPA Region 5, approved the Action Memorandum concerning the removal action required under this Order and the selection of the clean-up criteria applicable to the Site consistent with TSCA, in particular, 40 C.F.R. § 761.61(c), as implemented under CERCLA and the NCP, and with the Agreement (which implements the corrective action requirements of RCRA), CERCLA and the NCP. The Action Memorandum is attached to this Order as Appendix 2.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

28. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact, above, includes a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).