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UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re:	:	Chapter 11
	:	
MOTORS LIQUIDATION COMPANY, *et al.*,	:	Case No.: 09-50026 (MG)
f/k/a General Motors Corp., *et al.*	:	
	:	(Jointly Administered)
Debtors.	:	

OBJECTION TO GENERAL MOTORS' MOTION TO ENFORCE THE BANKRUPTCY COURT'S JULY 2009 SALE ORDER AND THE RULINGS IN CONNECTION THEREWITH, WITH RESPECT TO THE MOORE, *ET AL.* PLAINTIFFS

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For their Response in Opposition to the Motion by General Motors LLC to Enforce the Bankruptcy Court's July 5, 2009 Sale Order and the Rulings in Connection Therewith, the Moore, et al. Plaintiffs [Dkt. No. 14242], Terry Moore, Ellen Moore, David O'Nions, Diane O'Nions, Joellen Pisarczyk, and Marvin Pisarczyk, and all others similarly situated (collectively the "Moore Plaintiffs"), as pleaded in the case captioned *Terry Moore, et al. v General Motors, LLC*, United States District Court for the Eastern District of Michigan, Case No. 2:17-cv-14226-NGE-SDD (the "Moore Lawsuit")[1], state as follows:

INTRODUCTION

The Moore Plaintiffs are a group of homeowners who live in close proximity to the Milford Proving Grounds in Livingston County, Michigan. In the Moore Lawsuit, the Moore Plaintiffs allege that beginning at least as early as 1985 and through the July 10, 2009 (the "363 Sale Closing Date"), Old GM[2] deposited large amounts of sodium chloride onto the Milford Proving Grounds contrary to various environmental laws and in a negligent manner contaminating the groundwater beneath the Milford Proving Grounds and in the surrounding area. The Moore Plaintiffs also allege that after the 363 Sale Closing Date and through the present date, New GM continued to deposit large amounts of sodium chloride onto the Milford Proving Grounds contrary to various environmental laws and in a negligent manner contaminating the groundwater, and has, to date failed and refused to remediate the property. The Moore Plaintiffs further allege that Old GM and New GM fraudulently concealed the sodium chloride contamination. The Moore Plaintiffs allege

[1] The class pleaded in the Moore Lawsuit has not yet been certified.

[2] Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Motion to Enforce.

that the contamination "drifted" onto Plaintiffs' properties and caused pecuniary and personal injuries.[3]

Through the Motion to Enforce, New GM requests that the Court enforce the Sale Order by: (a) enjoining the Moore Plaintiffs from proceeding with the Moore Lawsuit until the Amended Complaint is further amended to remove references to New GM as a successor to Old GM and to reflect previous rulings of the Bankruptcy Court; (b) striking counts III, IV, V, VI and VII from the Moore Plaintiffs' Complaint; (c) requiring that the Moore Plaintiffs modify the independent fraud, negligence, trespass, private nuisance and public nuisance causes of action asserted against New GM; and, (d) requiring that the Moore Plaintiffs remove demands for exemplary and punitive damages from Plaintiffs' fraud-based claims.

The Court should deny the Motion to Enforce because (1) to the extent that the Sale Order could be construed as barring the Moore Plaintiffs' claims, the Moore Plaintiffs' rights to due process were violated because Old GM did not provide actual mailed notice of the 363 Sale, even though Old GM knew about the Moore Plaintiff's claims;[4] (2) the Sale Order does not prohibit the Moore Plaintiffs from pursuing the independent claims against New GM from the 363 Sale Closing Date to the present; and (3) New GM assumed liabilities for violations of environmental law and remediation

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[3] The Moore Plaintiff's Amended Complaint, attached hereto as Exhibit A, include a complete recitation of the claims and causes of action alleged in the Moore Lawsuit.

[4] *Elliott, et al. v. General Motors LLC (In re: Motors Liquidation Company)*, 829 F.3d 135 (2d Cir. 2016).

FACTUAL BACKGROUND

I. Old GM's Bankruptcy and Sale

On June 1, 2009, Old GM filed voluntary petitions for relief under chapter 11 of title 11 of the United States Code, 11 U.S.C. § 101, *et seq.* (the "Bankruptcy Code") in the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court").

On July 5, 2009, the Bankruptcy Court entered the *Order (i) Authorizing Sale of Assets Pursuant to Amended and Restated Master Sale and Purchase Agreement with NGMCO, Inc., a U.S. Treasury-Sponsored Purchaser; (II) Authorizing Assumption and Assignment of Certain Executory Contracts and Unexpired Leases in Connection with the Sale; and (III) Granting Related Relief* (the "Sale Order"). The Sale Order approved the *Master Sale and Purchase Agreement* (the "Purchase Agreement"). The Sale closed on July 10, 2009 (the "363 Sale Closing Date").

Pursuant to the terms of the Purchase Agreement, Old GM sold the Transferred Real Property to New GM, which Transferred Real Property included the Milford Proving Grounds. Purchase Agreement at § 2.2(a)(vi).

Pursuant to the terms of the Purchase Agreement, New GM assumed certain identified Liabilities, including but not limited to:

> all Liabilities arising under any Environmental Law (A) relating to conditions present on the Transferred Real Property, other than those Liabilities described in Section 2.3(b)(iv), (B) resulting from Purchaser's ownership or operation of the Transferred Real Property after the Closing or (C) relating to Purchaser's failure to comply with Environmental Laws after the Closing;

Purchase Agreement at § 2.3(a)(viii).

In relevant part, Section 2.3(b)(iv) of the Purchase Agreement provides:

> (b) Each Seller acknowledges and agrees that pursuant to the terms and provisions of this Agreement, Purchaser shall not assume, or become liable to pay, perform or discharge, any Liability of any Seller, whether occurring or accruing before, at or after the Closing, other than the Assumed Liabilities. In furtherance and not in limitation of the foregoing, and in all cases with the exception of the Assumed Liabilities, neither Purchaser nor any of its Affiliates shall assume, or be deemed to have assumed, any Indebtedness, Claim or other Liability of any Seller or any predecessor, Subsidiary or Affiliate of any Seller whatsoever, whether occurring or accruing before, at or after the Closing, including the following (collectively, the "Retained Liabilities"):
>
> > (iv) all Liabilities (A) associated with noncompliance with Environmental Laws (including for fines, penalties, damages and remedies); (B) arising out of, relating to, in respect of or in connection with the transportation, off-site storage or off-site disposal of any Hazardous Materials generated or located at any Transferred Real Property; (C) arising out of, relating to, in respect of or in connection with third-party Claims related to Hazardous Materials that were or are located at or that migrated or may migrate from any Transferred Real Property, except as otherwise required under applicable Environmental Laws; (D) arising under Environmental Laws related to the Excluded Real Property; or (E) for environmental Liabilities with respect to real property formerly owned, operated or leased by Sellers (as of the Closing), which, in the case of clauses (A), B) and (C), arose prior to or at the Closing, and which, in the case of clause (D) and (E), arise prior to, at or after the Closing;

Purchase Agreement at § 2.3(b)(iv).

The Sale Order provides, in relevant part: "Except for the Assumed Liabilities, pursuant to sections 105(a) and 363 (f) of the Bankruptcy Code, the Purchased Assets shall be transferred to the Purchaser in accordance with the [Purchase Agreement], and, upon the Closing, shall be free and clear of all liens, claims, encumbrances . . . [.]" Sale Order at ¶ 7.

A. The Ignition Switch Claims

In February of 2014, New GM began recalling cars due to defects in their ignition switches. *Elliott v. General Motors, LLC (In the Matter of Motors Liquidation Company)*,

829 F.3d 135, 143 (2d. Cir. 2016). Many of these cars were built years before Old GM's bankruptcy, and notwithstanding the Sale Order, filed class action lawsuits against New GM asserting "successor liability" claims and requesting damages for losses and injuries arising from the ignition switch defect and other defects. *Id.* As described by the Second Circuit, New GM argued that because of the "free and clear" provisions of the Sale Order, the claims could only be brought against Old GM, not new GM. *Id.*

In *Elliott,* the Second Circuit first determined that the "free and clear" provisions of the Sale Order covered "pre-closing accident claims and economic loss claims based on the ignition switch and other defects" but "does not cover independent claims or Used Car Purchasers' claims" and affirmed the Bankruptcy Court's decision not to enjoin independent claims and reversed the Bankruptcy Court's decision to enjoined its decision to enjoin the Used Car Purchasers' claims. *Id.* at 157-158 (citations omitted). The *Elliott* Court thus noted that the "Sale Order, if enforced, would thus bar those claims." *Id.* at 158.

The *Elliott* Court affirmed the Bankruptcy Court's finding that Old GM knew or should have known with reasonable diligence about the defects and concluded that "[i]ndividuals with claims arising out of the ignition switch defect were entitled to notice by direct mail or some equivalent, as required by procedural due process." *Id.* at 161. After determining that it "need not decide whether prejudice is an element when there is inadequate notice of a proposed § 363 sale," finding that the plaintiffs had demonstrated prejudice, and concluding that the terms of the Sale Order and the Purchase Agreement may have been different had the ignitions switch plaintiffs had an opportunity to be heard during the bankruptcy case, the *Elliott* Court, "reverse[d] the bankruptcy court's decision insofar as it enforced the Sale Order to enjoin claims relating to the ignition switch defect.

... Because enforcing the Sale Order would violate procedural due process in these circumstances, the bankruptcy court erred in granting New GM's motion to enforce and these plaintiffs thus cannot be 'bound by the terms of the [Sale] Order[].'" *Elliott* at 161-166.

II. The Moore Lawsuit

The Moore Plaintiffs allege a course of conduct that encompasses actions by both New GM and Old GM. The Milford Proving Grounds (the "MPG") have been in use by Old GM and New GM since 1924. In 1985, GM commissioned an engineering firm, McNamee, Porter and Seeley to conduct a water supply study at the MPG. The study revealed concentrations of sodium chloride in the MPG wells above USEPA standards and that "[r]oad salts appear to be a major source of chloride at the proving grounds." See, Exhibit B.

In 1997, the Michigan Department of Environmental Quality (the "MDEQ") learned of the sodium chloride contamination after a developer reportedly found high chlorides in the shallow aquifer when it started drilling wells for homes to be built to the southwest of the Milford Proving Grounds. The MDEQ and the Livingston County Health Department did their own testing and found high levels of sodium chloride in the MPG and at The Oaks, a residential neighborhood to the southwest of the MPG and the location of the Moore Plaintiff's homes. See, Exhibit H, June 17, 1997 letter from MDEQ. The MDEQ provided testing results to Old GM on October 2, 1997. See, Exhibit C.

In May 1998, the MDEQ wrote letters to the developer of the Oaks advising of the high levels of sodium chloride and that the levels were above residential health-based drinking water criteria. Old GM was made aware of the MDEQ's letters to the developer of the Oaks and, during a meeting with the MDEQ on May 29, 1998, denied liability for the sodium chloride contamination

and demanded that the MDEQ retract the letters. At that time, Old GM knew or should reasonably have known: 1) that the sodium chloride contamination existed; 2) that the MDEQ believed Old GM was responsible; and 3) that the contamination had likely "migrated" into the Oaks development. Old GM never gave any notice to the residents of the Oaks, including the Moore Plaintiffs, that the MPG was the likely source of the sodium chloride contamination.

The Moore Plaintiffs complaint brings counts against New GM for: 1) the independent actions of New GM after the July 5, 2009 Sale Order; and 2) the actions of Old GM based on successor liability. The Amended Complaint separates the claims between those relating to Old GM (counts I through VII) and those independent of Old GM (counts VIII through XIV). The independent claims allege actions by New GM after the July 5, 2009 Sale Order. These claims are independent of actions by Old GM and do not implicate the Sale Order.

OBJECTION

It is undisputed that the Moore Plaintiffs never received actual notice of the bankruptcy. The Moore Plaintiffs should be allowed to proceed with all claims against New GM, because, like the ignition switch plaintiffs, they were never given actual notice of the bankruptcy in violation of the Due Process Clause of the United States Constitution. As discussed, *infra*, the Moore Plaintiffs are analogous to the plaintiffs in *Elliott, et al. v. General Motors LLC (In re: Motors Liquidation Company)*, 829 F.3d 135 (2d Cir. 2016). "Because enforcing the Sale Order would violate procedural due process in these circumstances, [...] these plaintiffs thus cannot be 'bound by the terms of the [Sale] Order." *Id.* at 166.

I. Due Process Demands that the Moore Plaintiffs be Allowed to Proceed with their Claims.

The Due Process Clause provides, "[n]o person shall [...] be deprived of life, liberty or property, without due process of law." U.S. Const. amend. V. Due process requires that potential claimants be given adequate notice of a Chapter 11 bankruptcy proceeding. The type of notice required depends on whether Old GM knew about potential claimants and, potentially, whether those claimants were prejudiced by the lack of notice.

Due process analysis of notice of the 363 sale requires answers to two issues: 1) whether Plaintiffs were entitled to notice by direct mail; and 2) whether Plaintiffs were prejudiced by lack of adequate notice. Due process requires actual notice to claimants where Old GM knew of potential claims prior to the bankruptcy and where claimants had no previous contact or relationship with Old GM. *Elliott, et al. v. General Motors LLC (In re: Motors Liquidation Company)*, 829 F.3d 135 (2d Cir. 2016). Claimants were prejudiced where they were denied a seat at the negotiating table as a result of the lack of notice.

A. The Moore Plaintiffs were entitled to actual notice of the Old GM Bankruptcy.

The Second Circuit has already examined and decided the issue of what notice was required to satisfy due process for the Moore Plaintiffs. *Elliott, et al. v. General Motors LLC (In re: Motors Liquidation Company)*, 829 F.3d 135 (2d Cir. 2016). There, Plaintiffs were victims of faulty ignition switches produced by Old GM, where injuries took place before and after the §363 sale was completed. *Id.* at 148-150. Old GM produced cars with faulty ignition switches starting in the fall of 2002, despite knowledge that there were problems with the switch. *Id.* at 149. New GM first informed the National Highway Traffic Safety Administration of the defect on February 7, 2014 and did not begin recalls until that time. *Id.* at 150.

The court concluded that because Old GM knew or with reasonable diligence should have known of the ignition switch claims, plaintiffs were entitled to actual or direct mail notice, but

received only publication notice. *Id.* at 159-161. Old GM knew who purchased its cars, knew that there was a problem with the cars but gave no actual notice to potential claimants. *Id.*

There is no dispute in this case that the Moore Plaintiffs received only publication notice. The Moore Plaintiffs first learned of a possible claim against New GM in October 2014, when New GM abandoned previous denials and notified MDEQ and local residents, including the Moore Plaintiffs that sodium chloride contamination had been coming from the Milford Proving Grounds. See, Exhibit D. Old GM knew about the sodium contamination since at least 1985 and knew that it had migrated to neighboring properties since at least 1997 when the MDEQ informed them of the contamination. See, Exhibits B and C.

Knowledge of Old GM personnel can be imputed to New GM on claims to the extent that New GM had that knowledge as well. *In re: Motors Liquidation*, 541 B.R. 104, 114-116 (S.D.N.Y. 2015). To the extent as a matter of non-bankruptcy law that knowledge may be imputed as a consequence of documents in a company's files, documents in New GM's files may be utilized as predicate of that knowledge, even if they came into being before the sale from Old GM to New GM. *Id.*

Old GM knew of the sodium chloride contamination at the Milford Proving Grounds as early as 1985. See, Exhibit B. Old GM also knew at that time that the contamination was a problem, which would require remediation to ensure the safety of its own employees and the usability of its own water wells. See, Exhibit B.

Old GM knew that the sodium chloride contamination had migrated to surrounding properties prior to the 2009 bankruptcy because they were informed of the issue by the MDEQ as early as 1997. See, Exhibit C. Old GM vigorously denied the claims, but at a minimum, Old GM

knew or should have known that they were the – or at least one – source for sodium chloride contamination on surrounding properties.

"The facts paint a picture that Old GM did nothing, even as it knew that the ignition switch defect impacted consumers." *Elliott*, 829 F.3d at 159. Similarly, Old GM knew or should have known that residents living near the Milford Proving Grounds were potentially impacted by releases of sodium chloride onto their property. Worse still, Old GM took active measures to fight the MDEQ and to dispute the nature of the contamination: for seventeen years Old GM and then New GM fought the MDEQ on one hand while declining to inform its neighbors of the contamination and the likelihood that Old GM (and, later, New GM) was the source of the contamination. See, Exhibit E, Groundwater Quality Assessment Report. Old GM even filed suit against the MDEQ, seeking to end the MDEQ's investigation into Old GM's contamination of the property and to avoid any consequences of the contamination. See, Exhibit F, Complaint for Declaratory and Injunctive Relief, General Motors Corp. v. Michigan Department of Environmental Quality, No. 00-92551.

Inasmuch as Old GM knew or should have known about the sodium chloride contamination and migration prior to the 2009 bankruptcy, due process required that actual notice be given to potential claimants, including the Moore Plaintiffs. "[B]ecause parties holding future claims cannot possibly be identified and, thus, cannot be provided notice of the bankruptcy, courts consistently hold that, for due process reasons, their claims cannot be discharged by the bankruptcy courts' orders." *In re Motors Liquidation*, 568 B.R. 217, 229 (S.D.N.Y. June 7, 2017).

B. The Moore Plaintiffs were prejudiced by lack of actual notice.

Prejudice is not a necessary factor in this analysis (*Elliott*, 829 F.3d at 161-62). Even if it were, the lack of actual notice prejudiced the Moore Plaintiffs. "[T]he relevant inquiry is whether

courts can be confident in the reliability of prior proceedings when there has been a procedural defect." "[I]f [the court] cannot say, with fair assurance, after pondering all that happened without stripping the erroneous action from the whole, that the judgment was not substantially swayed by the error," then it must find a procedural due process violation. 829 F.3d 135 at 163. The Second Circuit in *Elliott*, assuming *arguendo* that prejudice was required to find a due process violation, found that the ignition switch plaintiffs were prejudiced by the lack of notice. "[W]e cannot say with fair assurance that the outcome of the § 363 sale proceedings would have been the same had Old GM disclosed the ignition switch defect and these plaintiffs voiced their objections to the "free and clear" provision. Because we cannot say with any confidence that no accommodation would have been made for them in the Sale Order, we reverse." *Id.* at 163.

Similarly, the Moore Plaintiffs were prejudiced when they missed the chance to sit at the negotiating table with other potential creditors. It cannot be known whether New GM would have made concessions for the Moore Plaintiffs in the same way concessions were made for other claimants, including claimants who lacked legal grounds to avoid the protections of the § 363 sale.

II. Because They Were Denied Due Process, The Moore Plaintiffs May Assert In The Michigan Trial Court That New GM Has Successor Liability

New GM cites to the Court's December 2015 Judgment in support of the argument that the Moore Plaintiffs may not proceed with claims relating to successor liability. However, that ruling did not include the Second Circuit's due process analysis, which is essential to the Moore Plaintiffs' argument here. As the Second Circuit held in *Elliott*, Old GM's failure to give adequate notice to the Moore Plaintiffs of the bankruptcy allows them to assert claims for successor liability here. *Elliott*, 829 F.3d at 163-66.

If the Court determines that the Moore Plaintiffs' due process rights were violated when Old GM failed to give them actual notice of the bankruptcy, the next question is whether New GM is a successor of Old GM under Michigan laws. This Court has previously held that questions regarding successor liability should be left to the state courts. "[T]he issue whether state law recognized a successor liability claim in the circumstances was left to the state court to decide." *In re Motors Litigation*, 568 B.R. 217 (S.D.N.Y. 2017). The Court has left such analysis to the trial court in the ignition switch proceedings. See *In re: General Motors LLC Ignition Switch Litigation*, 2017 WL 3382071 (S.D.N.Y. Aug. 3, 2017); *In re: General Motors LLC Ignition Switch Litigation*, 2017 WL 6509256 (S.D.N.Y. Dec. 19, 2017). Similarly, the Court should leave the question of successor liability in this case to the state or local district court in Michigan.

III. The Moore Plaintiffs' independent claims must be allowed to continue against New GM

The Moore Plaintiffs allege a continuing course of conduct, beginning at least as early as 1985 and continuing through the present day and involving actions by both Old and New GM. At the very least, the Moore Plaintiffs' claims against New GM for the conduct of New GM should be allowed to continue as independent claims.

In an attempt to remedy New GM's objections to Plaintiff's Complaint, Plaintiffs filed an amended complaint attempting to distinguish between the wrongful acts of New GM and Old GM. Plaintiffs' Amended Complaint contains claims against both New and Old GM, separated out into separate counts. Counts I through VII allege claims against Old GM, while counts VIII through XIV allege claims specifically against New GM. As these are claims against New GM for the actions of New GM, they do not implicate the Sale Order and are not subject to the protections of the 2009 bankruptcy. The Moore Plaintiffs' Complaint specifically states that counts X, XI, XII,

XIII, and XIV are against New GM exclusively for the conduct of New GM after the Sale Order was entered. These claims have nothing to do with Old GM. At a minimum, these independent claims should be permitted to proceed.

IV. The Moore Plaintiffs' Claims Include Assumed Liabilities for Violations of Environmental Law and Remediation.

As stated, supra, New GM assumed certain liabilities as part of the Purchase Agreement. Specifically,

> all Liabilities arising under any Environmental Law (A) relating to conditions present on the Transferred Real Property, other than those Liabilities described in Section 2.3(b)(iv), (B) resulting from Purchaser's ownership or operation of the Transferred Real Property after the Closing or (C) relating to Purchaser's failure to comply with Environmental Laws after the Closing;

The Moore Plaintiffs bring counts I, II, VIII and IX of their complaint for Old GM and New GM's failure to comply with Michigan environmental laws. Specifically, the Moore Plaintiffs claim that Old GM and New GM violated the Michigan Natural Resources and Environmental Protection Act (counts I and VIII) and the Michigan Environmental Protection Act (counts II and IX). Pursuant to the Purchase Agreement, these are assumed liabilities and the Moore Plaintiffs should be allowed to proceed with them as pleaded.

WHEREFORE, Terry Moore, *et al.* respectfully request that this Court enter an order denying New GM's motion to apply the July 5, 2009 Sale Order to the Moore Plaintiffs, and for such further relief as this Honorable Court deems just.

Dated: Chicago, Illinois
March 21, 2018

Respectfully submitted,

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Exhibit A

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

TERRY MOORE, ELLEN MOORE, DAVID O'NIONS, DIANE O'NIONS, JOELLEN PISARCZYK, MARVIN PISARCZYK, and all others similarly situated,

Plaintiffs,

vs.

GENERAL MOTORS LLC,

Defendant.

Case No. 2:17-cv-14226-NGE-SDD

Hon. Nancy G. Edmunds

Hon. Mag. Stephanie Dawkins Davis

There is no other pending or resolved civil action arising from the transaction or occurrence alleged in the complaint.

PLAINTIFF'S FIRST AMENDED CLASS ACTION COMPLAINT AND JURY DEMAND

Plaintiffs, Terry Moore, Ellen Moore, David O'Nions, Diane O'Nions, Joellen Pisarczyk and Marvin Pisarczyk, on behalf of themselves and all others similarly situated, state the following as their class action complaint against Defendant, General Motors LLC:

SYNOPSIS OF CLAIMS

1. This action arises from contamination of Plaintiffs' groundwater by Defendant and its predecessor at the Milford Proving Grounds, and Defendant's denial and concealment of claims arising from its contamination. Plaintiffs seek

compensation for property damage and personal injury caused by Defendant's pollution, and for the cost of obtaining potable water.

PARTIES AND JURISDICTION

2. Plaintiffs, Terry Moore, Ellen Moore, David O'Nions, Diane O'Nions, Joellen Pisarczyk and Marvin Pisarczyk are residents of the City of Milford, Michigan. Plaintiffs own or in the recent past have owned real property that draws on ground water polluted by Defendant's and its predecessor's release of hazardous substances from Defendant's Milford Proving Grounds facility in Milford, Michigan ("MPG").

3. Plaintiffs bring this action individually and as representatives of a class of persons defined as:

> All persons who reside or have resided in the past 10 years in any home to which Defendant sent a Notice of Migration in or about October 2014, and who claim to have suffered damages as a result of Defendant's contamination of groundwater.

4. Defendant General Motors LLC ("New GM") is a Delaware limited liability company with its principal place of business in Detroit, Michigan. Defendant conducts business in Livingston County, Michigan.

5. Plaintiffs bring this action to recover compensation for damages caused by Defendant's tortious conduct and violations of Michigan environmental statutes.

6. The amount in controversy of each class member exceeds the sum of $25,000, exclusive of interest, costs and attorney fees.

7. The Court has subject matter jurisdiction over this cause pursuant to MCL 600.601 and 600.605.

8. Venue is proper in Livingston County, pursuant to MCL 600.1629.

COMMON FACT ALLEGATIONS

THE MPG

9. The MPG is an approximately 4,011-acre vehicle testing and development facility located near the border of Livingston and Oakland Counties. Defendant and its predecessor, Motors Liquidation Company, f/k/a General Motors Corporation ("Old GM") have owned and operated the MPG since 1924 and tested vehicles on the site 24 hours per day, seven days per week. The MPG contains over 100 miles of paved and dirt roads, numerous parking lots, over 115 commercial and industrial buildings, several salt storage buildings, a wastewater treatment plant, landfills (for debris, compacted cars, pesticides, scrap tires etc.), and hundreds of aboveground and underground storage tanks containing petroleum products, sodium chloride, and numerous other hazardous materials.

10. Substantial amounts of the following hazardous materials are being used or have been used at the MPG: fuel oil, antifreeze, transmission fluid, chlorine, denatured alcohol, diesel fuel, heating oil, Dowtherm J and SR-1, ferric

chloride, gasoline, lubricants and greases, methanol, MTBE, motor oil, nitrogen, propane, road deicer or potassium acetate, salt, brine, sodium chloride, sulfuric acid, windshield washer solvent, Freon, sodium hydroxide, car batteries, Syltherm HF, corrosion inhibitor, lean acid batteries, calcium chloride with boost, lithium chloride, photographic materials, paint thinners, water treatment chemicals, mineral spirits, chlorinated and non-chlorinated solvents, PCBs, hydrochloric acid, herbicides, insecticides, lithium batteries, lacquer thinner, naphtha, adhesives, Stoddard solvent, mercury batteries, mercury, hydraulic oil, and gear oil. The majority of these materials are stored in the Main Building Area on the southern portion of the MPG.

11. There are several small lakes on the MPG premises, including Mott Lake, Sloan Lake, and Pickett Lake. Mann Creek bisects the property from northeast to southwest and drains a supermajority of the site ultimately flowing into Moraine Lake. Most of the Main Building Area (located on the southern portion of the property) drains to Mott Lake and then to Mann Creek. Groundwater flow from these areas is predominantly to the southwest. Water samples in 2000 taken from Mann Creek where the creek enters the MPG contain 42 mg/l chloride; water samples taken from where the creek exits the MPG contain up to 400 mg/l of chloride.

12. Defendant and Old GM released hundreds of thousands of tons of salt at the MPG over the last several decades (the "Releases"), leading to extremely high concentrations of sodium and chloride in surface and groundwater at the MPG.

13. The Releases migrated from the MPG into groundwater beneath Plaintiffs' property, causing extremely high concentrations of sodium and chloride in water used by Plaintiffs (the "Contamination").

14. The Contamination has caused and will cause the chemical extraction from the earth, and transport into the water used by Plaintiffs, of existing but otherwise dormant hazardous substances including, but not limited to, arsenic.

DEFENDANT AND OLD GM'S KNOWLEDGE OF THE RELEASES AND CONTAMINATION

15. Since 1985, at the latest, Defendant and Old GM were well-aware of the Releases and the Contamination.

16. In 1985, Old GM engaged McNamee, Porter and Seeley ("MPS") to conduct a Water Supply Study (the "MPS Study"). The purposes of the MPS Study included evaluation of the source and extent of chloride contamination, existing water consumption and future demands, and possible locations for new water supply wells.

17. The MPS Study found:

a. The then-existing water supply system at MPG as consisted of two production wells located near the military building (southern portion of the property). "Another production well (Well 3), drilled in 1953, was a major supply source, but because of high chloride concentrations, is now only used for emergency supply." The 1985 chloride concentration at Well 3 was 600 mg/l compared to the USEPA's National Secondary Drinking Water Regulations of 250 mg/l.

b. The subsurface conditions at the MPG are variable (containing unsorted clay, silt, sand and gravel), and Mann Creek drains the majority of the MPG, exiting near the southwest corner.

c. Chloride in surface water at Mann Creek exiting the property was 300 mg/l in 1984; both Mott Lake and Pickett Lake had chloride concentrations of 404 mg/l and 480 mg/l, respectively.

d. There were four possible sources of chlorides in the MPG groundwater: (1) road salt used as ice control on paved roads; (2) calcium chloride used for dust control on dirt roads; (3) wastewater effluent (OLD GM used water softeners at its industrial facilities and wastewater discharge was 543 mg/l in 1980); and (4) salt contained in geologic deposits. *Id.* at 11. However, the study stated that "**[r]oad salt appears to be a major source of chloride at the proving grounds**" where approximately 10,000 tons of salt was used each year on the 120 miles of paved roads and parking lots. *Id.*

18. MPS recommended that Old GM monitor chloride levels in wells and surface waters, examine salt usage to determine if lesser amounts could be used, and check any new wells drilled at the site for contamination. MPS further noted that "[w]ater quality consistent with Federal Primary and Secondary Drinking Water Standards is considered essential."

19. After receiving the MPS Study, Old GM did not disclose the Contamination to regulatory authorities or local residents, reduce salt usage, or monitor the groundwater and surface water contamination.

20. Because of its Contamination, Old GM discontinued use of its own existing domestic water supply wells.

MDEQ TESTING AND NOTICE TO OLD GM OF THE CONTAMINATION

21. In 1997, the Michigan Department of Environmental Quality ("MDEQ") learned of the Contamination after a developer reportedly found high chlorides in the shallow aquifer when it started drilling wells for homes to be built to the southwest of the MPG. MDEQ immediately advised GM that it was evaluating the source of this contamination and requested that Old GM furnish information relating to its salt usage.

22. In May and June of 1997, the Livingston County Health Department ("LCHD") conducted a series of chloride sampling results taken from portions of Mann Creek located within the MPG. The test results showed elevated levels of chloride exceeding 300 mg/l.

23. On October 2, 1997, MDEQ provided Old GM with results of groundwater sampling at The Oaks, a residential neighborhood to the southwest of the MPG. MDEQ advised Old GM that groundwater flow in this area was to the

southwest, and stated that "it appears that a source of sodium and chlorides may therefore emanate from the GM Proving Grounds facility."

24. In May 1998, MDEQ wrote letters to the developer of The Oaks that stated, *inter alia*:

a. "Sodium levels are above residential health based drinking water criteria and chlorides are present above residential aesthetic criteria in water samples taken from some homes and test wells in the area of Kensington/Jacoby/Stobart"

b. "Due to regional groundwater flow, which is to the southwest, and the pattern of distribution of those wells that are affected, the MDEQ believes that the sodium and chloride are not naturally occurring and are from a source northeast of your development"

c. "This contamination is migrating onto the Kensington/Jacoby/Stobart and Oaks on Beach Lake properties."

25. Old GM became aware of MDEQ's letters to the developer of The Oaks and, during a meeting with MDEQ on May 29, 1998, denied liability for the Contamination and demanded that MDEQ retract the letters.

26. Beginning in 1998, Old GM commissioned a series of reports from Conestoga-Rovers Associates ("CRA") designed to refute or at least obfuscate MDEQ's hypothesis that Old GM's prodigious use of salt at the MPG was the source of the Contamination. This series of reports contended, *inter alia*, that groundwater flow from the MPG was to the south-southeast, and CRA's (very limited) testing indicated that groundwater quality at a downgradient monitoring

well did not exceed the Act 451, part 201 Generic Residential Groundwater Criteria of 160 mg/l (or the Generic Industrial Groundwater Criteria of 450 mg/l) for sodium, and marginally exceeded the 250 mg/l aesthetic criteria for total chloride.

27. In a 1999 Salt Usage Report, CRA identified the following uses of salt at the MPG:

- **Grit Trough Near Building 83**: Consists of a paved road, paved shoulder, and grit containment area in the middle of the MPG that has been in operation for 15 years. The Grit Trough is filled with approximately 7,200 gallons of salt grit solution per day. Test vehicles drive through at 40 mph. "During the testing procedure, a small amount of the grit solution may be splashed out of the grit trough containment area and onto adjacent grassed areas." A nearby well reported chloride contamination at 750 mg/l.
- **Corrosion Test At Building 83**: Vehicles drive through the building (which is located near the middle of the MPG) and are sprayed with a 10,000 mg/l brine solution which drains inside and outside of the building. This building was constructed in 1980s.
- **Several Salt Storage Buildings**: These include a salt dome at Building 74, former salt storage structure near Building 11, and sidewalk salt storage near Building 11; all of which are located on the southern portion of the MPG.
- **Salt Splash Road Facility Near Building 74**: The salt splash is an outside testing area in which a 5 percent salt solution is used to flood a paved area that vehicles drive through. Approximately, 2 to 4 tons of salt is used per week. OLD GM claimed most of the water is recycled except for periodic runoff. The Salt Splash Road Facility is located on the southern portion of the MPG.
- **Brine Storage Tank Near Building 10**: 7,600 gallon tank used for water softener located on the southern portion of the property.
- **Water Softeners**: Old GM used approximately 200 tons of salt per year for water softening which presently drains to Mott Lake (southern portion

of the property). Prior to 1997, backwash from the water softening at Building 12 discharged at Outfall 003 to the ground.

- **Military Testing Area**: This area contains 5 earthen pits (on the southern portion of the property) filled with salt water in the winter and driven through by military vehicles. Old GM estimated 20 to 40 tons of salt were deposited in the pits per year.
- **Road Salting and Dust Suppression**: Old GM estimates that it used approximately 7,800 tons of salt per year for pave roads, 7 tons per year of calcium chloride for dirt roads, and 160 tons per year for sidewalks.

28. In June 2000, in response to MDEQ's criticisms of OLD GM's unwillingness to take responsibility for the Contamination, Old GM represented to MDEQ:

- Groundwater flow in the southwest portion of the Proving Grounds is to the south and southeast not the southwest;
- Groundwater contamination on the MPG could be a result of bedrock brine intrusion caused by local overburden production and local gas wells;
- Groundwater contamination at adjacent properties could be the result of county road salting, residential water softener and septic tank usage;
- Concentrations of sodium and chloride at MPG are similar to those occurring at other areas of Oakland and Livingston Counties and thus could be naturally occurring;
- The contamination levels at The Oaks are higher than those at Mann Creek and therefore Mann Creek cannot be the cause of increased contamination at The Oaks;
- The MPG was not a "facility" under NREPA;
- Old GM's permitted releases of salt from its wastewater treatment plant were exempt;
- MDEQ has not made the requisite case-by-case determination that sodium and chloride are "hazardous substances"; and
- The 1985 study's conclusion that road salting caused contamination at the MPG was wrong.

29. On September 22, 2000, MDEQ advised Old GM in writing of MDEQ's final decision to classify the MPG as a contaminated "facility" and to reject Old GM's request that MDEQ not take any action regarding the sodium and chloride contamination until MDEQ had reviewed Old GM's "Salt Use Reduction Monitoring Plan."

30. MDEQ's September 22, 2000 correspondence also stated, in relevant part:

a. "[S]odium Chloride, a hazardous substance, was released, deposited, or became located at the [MPG]" and "[t]he concentrations of sodium and chloride release to the groundwater exceed the residential cleanup requirements" established under Michigan law.

b. Old GM's Salt Use Reduction Monitoring Plan does not, as required by Michigan law, "evaluate and address past releases of salt on the property and the impact those releases have had and continue to have on the environment," nor does it "evaluate locations outside the [MPG] that are, or potentially are, impacted by release of salt at the [MPG]."

c. "[Old GM] uses large quantities of sodium chloride (salt) at the [MPG]. Salt is used as a deicing agent, in water softeners, and as a corrosive agent for vehicle corrosion testing."

d. During the 1990s, the [MPG] used approximately 7,430 tons of salt per year on the equivalent of approximately 102.4 miles of road, test track, and parking areas. This equates to 72.6 tons of salt per mile of road annually. By comparison, Livingston County uses an average of 24 tons of salt per mile of road. GM uses three times as much salt per mile of road . . . Moreover, this comparatively high per mile salt application rate is concentrated in an area of six square miles at the [MPG] compared to an areas of 576 square miles for the county."

e. "Salt Splash Road is an outside vehicle testing area in which 5 percent sodium chloride solution is used for vehicle corrosion testing. Vehicles continuously drive through a 12-foot wide

paved area that is flooded with the aqueous salt solution that is maintained in two concrete tanks. The salt solution is supposed to be captured on the paved area and recycled back into the contaminant tanks. However, during a visit to the [MPG], staff of the Environmental Response Division (ERD), MDEQ observed what appeared to be gullies cut into the unpaved area next to the paved area. These gullies promote the drainage of water with high concentrations of salt into unpaved areas, posing a greater potential for impact on the soil and groundwater. Erosion gullies also seem to appear in the same area in historical air photos of the [MPG]. Further, according to witness testimony, [Old GM] used Salt Splash Road for many years without any recovery or recycling of the salt solution."

f. "A military vehicle testing area in the northeastern portion of the site, which is no longer in use, consisted of five earthen pits that contained water. Military and other four-wheel drive test vehicles were driven through the pits. [Old GM] added approximately 20-40 tons of salt per year to these pits during the winter months to prevent the water in the pits from freezing. There was no method to recover the brine solution in these pits."

g. "The grit trough is an outside corrosion testing area . . . Test vehicles move through the trough to undercoat the car with a salty grit and water mixture. A shallow (or 'drift') well located near the grit trough has supplied water to the trough since November 1998. A sample from this drift well had a reported chloride concentration of 595 mg/l."

h. "[Old GM] discharges approximately 200 tons of salt per year from water softeners at the [MPG]. . . [Old GM] discharged water softener backwash to a wetland via Outfall 003 for 30 years. Samples from Outfall 003 tested as high as 2,200 mg/l of chloride."

i. "[Old GM] now discharges all water softener backwash water to their sanitary sewer system, which goes to an on-site wastewater treatment plant. The discharge from the wastewater treatment plant at the [MPG] discharges to an unlined impoundment (Mott Lake) on the [Old GM] property . . . Concentration of chloride in water samples collected from Mott Lake ranged from 443 to 555 mg/l of chloride . . . Mott Lake,

because it is unlined, is likely providing recharge to, and potentially contaminating, groundwater."

j. "Mann Creek enters the [MPG] from the northeast and exits the property at the southwest corner . . . MDEQ has estimated that Mott Lake discharges 826 pounds of salt per day to Mann Creek . . . Mott Lake, Outfall 001, and the majority of the overland runoff from the [MPG] property drain to Mann Creek. Water samples taken from Mann Creek where the creek enters GM property contain 42 mg/l chloride. Water samples taken from where the creek exits GM property contain up to 400 mg/l of chloride."

k. "Overland runoff and stormwater also drains to Pickett lake, located on the [MPG] property. Water samples from Pickett Lake have contained chloride concentrations as high as 13,000 mg/l. Pickett Lake, with its high concentrations of chloride, is also likely providing recharge to, and potentially contaminating, the groundwater."

l. "Water Samples from several widely spaced monitoring wells across the [MPG] indicate elevated levels of chloride are widespread. The concentrations of chloride in these wells ranged from 200 mg/l to 900 mg/l. This compares to a typical background concentration in groundwater of 10 mg/l."

m. "Groundwater flow direction varies across the [MPG], but generally ranges from southeasterly to southwesterly. Water samples from residential wells located southwest, south, and southeast of the [MPG] contain sodium and chloride at concentrations that are approaching or exceed Part 201 residential drinking water criteria. Documented increases of chloride concentrations in private wells south of the [MPG] indicates groundwater contaminated with chlorides is migrating through the area."

n. "The [LCHD] is monitoring the drinking water at 24 homes southwest of the [MPG]. The concentration of chloride in 13 of these 24 private wells ranges from 261 mg/l to 651 mg/l. The average concentration of chloride in these affected homes is 393 mg/l. The MDEQ drinking water criterion for chloride is 250 mg/l. The concentration of sodium in 10 of these wells ranges from 186 mg/l to 371 mg/l with an average concentration of 242 mg/l. The MDEQ drinking water criterion for sodium is 120 mg/l."

31. On October 13, 2000, Old GM initiated a civil action against MDEQ alleging that: (1) sodium chloride, ionic sodium, and chloride are not "hazardous substances" under state or federal law; (2) MDEQ's residential groundwater criterion for sodium and chloride are arbitrary and capricious; (3) the "permitted release" exemption applies to water softener regenerant discharges, road salting, and dust surpassing activities at the MPG; (4) the MPG is not a "facility" because the sodium and chloride contaminants on the site represent background levels; and (5) MDEQ's September 22, 2000 letter constituted a final agency action which was not supported by law or fact, in excess of statutory authority and arbitrary and capricious.

32. Pursuant to an April 26, 2001 Pollution Minimization Agreement ("PMA") Old GM and MDEQ agreed that: (1) GM would dismiss its complaint without prejudice; (2) MDEQ would withdraw its September 22, 2000 facility letter; (3) MDEQ would not issue another determination that the MPG is a "facility" without providing GM 30-days' notice; and (4) GM would implement a number of best management practices with respect to the use, management, are storage of road salt and monitor the effects of such measures. The PMA further provided that if a final five-year summary report to be prepared by GM did not document a statistically significant trend of decreasing ionic sodium and chloride concentrations in groundwater at the MPG, OLD GM must conduct a hydrological

study to determine the known sources of salt in the groundwater and the impact on uses of groundwater at the MPG.

33. In May 2007, Old GM submitted to MDEQ a Five Year Summary Report that stated that Old GM could not document a statistically significant trend of decreasing ionic sodium and chloride concentrations in ground water at the MPG. CRA, on Old GM's behalf, also asserted that groundwater flows vary and that the bedrock beneath the MPG "contains naturally occurring brines, which could be a source of sodium and chloride in the overburden groundwater due to the natural upward gradient, groundwater extraction from the overburden, or bedrock drilling activities (*i.e.*, installation of oil and gas production wells)." In addition, CRA, on behalf of Old GM, steadfastly denied that Old GM was responsible for the Contamination at The Oaks. Instead, CRA attributed salt contamination at The Oaks, at least in part, to offsite sources including (1) individual septic systems, (2) residential water softeners, (3) county road salting practices, and (4) naturally occurring brines.

34. In subsequent communications with MDEQ and others, Old GM continued to maintain that the MPG was not the source of the Contamination in Plaintiffs' groundwater.

DEFENDANT'S ACQUISITION OF THE MPG AND FAILURE TO OBTAIN A BASELINE ENVIRONMENTAL ASSESSMENT

35. On June 1, 2009, Old GM filed a petition in bankruptcy.

36. Old GM failed to give Plaintiffs notice of claims against Old GM arising from the Releases and Contamination.

37. During the time of Old GM's bankruptcy filing, Old GM had never given notice of any groundwater contamination emanating from the MPG to any Plaintiff

38. On July 5, 2009 (the "Sale Date"), Defendant purchased the MPG, along with all buildings, roads, facilities, wells, and other structures from the Old GM bankruptcy estate.

39. After purchasing the MPG, Defendant continued to use the MPG in essentially the same fashion as Old GM had used it since the 1920's.

40. After purchasing the MPG, Defendant operated as a continuing enterprise of Old GM:

a. Retained the substantially the same employees as Old GM;

b. Retained substantially the same supervisory personnel as Old GM;

c. Retained the same production facilities in the same location, specifically the MPG location;

d. Continued to test the same products;

e. Retained a substantially similar name – General Motors Corporation became General Motors, LLC;

f. Retained most of Old GM's assets;

g. Continued Old GM's business operations – designing, building, testing and selling automobiles;

h. Continued to hold itself out as General Motors, using similar branding and marketing.

41. Throughout the process of the bankruptcy and afterwards, Defendant was in possession of all information and data collected by Old GM prior to the bankruptcy regarding the Contamination

42. In connection with its acquisition of the MPG, Defendant failed to obtain a Baseline Environmental Assessment within the meaning of MCL 324.20101(f).

43. After its acquisition of the MPG, Defendant perpetuated the Releases.

44. On March 7, 2014, CRA submitted to MDEQ Defendant's 2013 Annual Salt Usage and Monitoring Report which stated that over the course of the previous six years, GM had released into the environment: 16,671 tons of road salt; 226 tons of sidewalk salt; and 1,517 tons of water softening salt. GM, however, did not fully disclose the amount of salt released into the environment from vehicle testing.

45. Defendant has acted as a mere continuation of Old GM, after Old GM's 2009 bankruptcy. To wit:

a. After its acquisition of the MPG, Defendant has continued to operate the business of Old GM, including the MPG, with substantially identical personnel, including management of the MPG;

b. After its acquisition of the MPG, Defendant has continued to operate the business of the MPG, in substantially the same fashion;

c. After its acquisition of the MPG, Defendant has had all data, documentation and relevant information regarding the Contamination, which were available to Old GM.

FRAUDULENT CONCEALMENT

46. Defendant and its predecessor, Old GM, had actual knowledge of the Releases and the Contamination after 1985.

47. Defendant and Old GM knew that their usage of salt at the MPG was the predominant source of the Contamination at the MPG and at nearby locations, including Plaintiffs' neighborhoods.

48. Despite its knowledge of the Releases and Contamination, Defendant and Old GM took no action to remediate the Contamination or stop it from spreading.

49. Despite its knowledge of the Releases and Contamination, before 2014 Defendant and Old GM made affirmative misrepresentations that were designed to prevent discovery that their Releases from the MPG were the predominant causes of the Contamination. Such false representations included statements that groundwater flowed in a south-southeasterly direction, rather than

southwesterly, and that the sodium and chloride Contamination was due to "naturally occurring brines."

DEFENDANT FINALLY COMES CLEAN

50. In October of 2014, Defendant abandoned previous denials and notified MDEQ, local residents, including Plaintiffs, and the public that Defendant had caused the Contamination (the "Notice of Migration").

51. Defendant's Notice of Migration stated, in part:

a. At the request of MDEQ [Defendant] installed three monitoring wells near the southwest boundary of the Milford Proving Grounds;

b. Groundwater sampling from those wells show groundwater with elevated levels of sodium and chloride likely have migrated off the Proving Grounds;

c. The recent sodium and chloride concentrations in the furthest downgradient well were 630 mg/l and 1,300 mg/l respectively; and

d. Groundwater potentiometric contours indicate groundwater flow in the southwest corner of the Proving Grounds is to the south and southwest.

52. The Notice of Migration was the first time Defendant or Old GM had ever acknowledged off-site migration of the Contamination.

CLASS ALLEGATIONS

53. The class is so numerous that joinder of all members is impracticable.

54. There are questions of law or fact common to the members of the class that predominate over questions affecting only individual members.

55. The claims or defenses of the representative parties are typical of the claims or defenses of the class.

56. The representative parties will fairly and adequately assert and protect the interests of the class.

57. The maintenance of the action as a class action will be superior to other available methods of adjudication in promoting the convenient administration of justice.

COUNT I – VIOLATION OF NREPA PART 201
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

58. Plaintiffs incorporate by reference the foregoing allegations.

59. From 1924 to the Sale Date, Old GM owned and operated the MPG.

60. During said time and place, Old GM caused the Releases and the Contamination without a permit to do so.

61. On October 13, 2014, Defendant communicated the Notice of Migration in which Defendant expressly or implicitly acknowledged:

a. Defendant is the current owner and operator of the MPG.

b. The MPG is a "facility" within the meaning of MCL 324.20101(s).

c. Sodium and chloride are hazardous substances.

d. The sodium and chloride Contamination is migrating in a south and southwesterly direction, towards the Plaintiffs' residences.

62. As the owner and operator of the MPG facility from 1924 to the Sale Date, Old GM was required to notify MDEQ and Plaintiffs within 30 days after obtaining knowledge that the release has migrated and "immediately stop or prevent an ongoing release at the source."

63. Furthermore, MCL 324.20107a required Old GM to exercise due care with respect to the contamination emanating from the MPG by undertaking response activity necessary to mitigate unacceptable exposure to hazardous substances.

64. Old GM failed to fulfill its obligations under Part 201 of the Michigan Natural Resources and Environmental Protection Act ("NREPA").

65. Due to Old GM's failure to notify Plaintiffs of the contamination prior to the bankruptcy and succession liability, Defendant is liable for costs and damages caused by Old GM pursuant to MCL 324.20126 and 20126a for the Plaintiffs' costs of response activities and damages for the full value of injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing the injury, destruction, or loss resulting from the release.

66. Defendant is strictly liable for cleanup costs prior to the Sale Date, under MCL 324.20126 due to its failure to obtain a Baseline Environmental Assessment within the meaning of MCL 324.20101(l).

67. As a direct and proximate result of Old GM's Releases and Contamination for which Defendant is liable through succession theory and lack of notice, Plaintiffs have suffered irreparable harm inasmuch as the groundwater used by Plaintiffs has been polluted, impaired and rendered unusable.

68. Plaintiffs have incurred, and will incur, response activity costs for which Defendant is responsible for reimbursement.

69. On November 29, 2017, pursuant to MCL 324.20135(3), Plaintiffs notified New GM, Defendant, the MDEQ, and the Michigan Attorney General, that they would be seeking relief under Part 201.

COUNT II – VIOLATION OF MICHIGAN ENVIRONMENTAL PROTECTION ACT
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

70. Plaintiffs incorporate by reference the foregoing allegations.

71. Plaintiffs assert this cause of action under the Michigan Environmental Protection Act ("MEPA") for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction.

72. As a result of succession liability and Defendant's failure to notify Plaintiffs of Releases and Contamination prior to bankruptcy, Defendant is liable for pollution, impairment and, for all practical purposes, destruction of the groundwater beneath Plaintiffs' property from 1924 to the Sale Date.

73. Old GM's Releases during said time polluted and threatened the usability of the groundwater beneath Plaintiffs' property.

74. Equity requires that Defendant be enjoined from further Releases into the environment that would pollute, impair and/or destroy the groundwater beneath Plaintiffs' property.

COUNT III – FRAUD
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

75. Plaintiffs incorporate by reference the foregoing allegations.

76. Old GM had actual knowledge that the Contamination was migrating off-site from 1985 through the Sale Date.

77. Despite its actual knowledge of the Contamination migration, Old GM failed to ever notify Plaintiffs and those similarly situated of the Contamination from 1985 to though the Sale Date.

78. Old GM concealed its knowledge of the Contamination migration by knowingly and affirmatively making spurious assertions that the MPG was not the source of the Contamination and that groundwater flowed in a south to southeast direction from the MPG.

79. Old GM made its representations to MDEQ and others with actual intent to defraud, or at least with reckless disregard for the truth and as positive assertions.

80. As a direct and proximate result of Old GM's fraud, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property and premature obsolescence due to corrosion;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

81. Under the circumstances, exemplary damages are appropriate to rectify Old GM's wrongful conduct. Old GM and its assets must not be allowed to hide behind the curtain of bankruptcy when it fraudulently withheld information of damages it was causing to Plaintiffs.

COUNT IV NEGLIGENCE
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

82. Plaintiffs incorporate by reference the foregoing allegations.

83. Old GM had duties to:

a. Refrain from polluting the environment and, specifically, from discharging into the waters of the State of Michigan a substance that is or may become injurious to the public health, safety or welfare, or domestic use of such waters.

b. Report ongoing releases to MDEQ and notify Plaintiffs and those similarly situated that the Contamination impaired the public health, safety or welfare, or domestic use of such waters,

and that the Releases had migrated from the MPG to groundwater beneath Plaintiffs' property.

c. Prevent ongoing releases of hazardous substances into the groundwater and/or diligently pursue remediation of same.

d. Take action to mitigate Plaintiffs' unacceptable exposure to hazardous substances.

84. Old GM breached its duties by:

a. Causing the Releases and the Contamination.

b. Failing to report the Releases and Contamination to MDEQ, and to notify Plaintiffs and those similarly situated.

c. Failing to prevent ongoing releases of hazardous substances into the groundwater and/or diligently pursue remediation of same.

d. Failing to take action to mitigate Plaintiffs' unacceptable exposure to hazardous substances.

85. As a direct and proximate result of Old GM's breaches of duties, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property and premature obsolescence due to corrosion;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

COUNT V – TRESPASS
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

86. Plaintiffs incorporate by reference the foregoing allegations.

87. The Releases prior to the Sale Date constituted an unauthorized direct and immediate invasion of land over which Plaintiffs and those similarly situated at all relevant times had a right of exclusive possession.

88. As a direct and proximate result of Defendant's invasion of Plaintiffs' land, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property including, but not limited to, household appliances and plumbing;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

COUNT VI – PRIVATE NUISANCE
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

89. Plaintiffs incorporate by reference the foregoing allegations.

90. Old GM's intentional Releases and Contamination prior to the Sale Date unreasonably interfered with Plaintiffs' use and enjoyment of their property.

91. As a direct and proximate result of Old GM's interference with Plaintiffs' use and enjoyment of property, Plaintiffs and those similarly situated have suffered substantial damages.

COUNT VII – PUBLIC NUISANCE
NEW GM (FOR CLAIMS *RELATING TO* OLD GM)

92. Plaintiffs incorporate by reference the foregoing allegations.

93. The Releases and Contamination by Old GM prior to the Sale Date, significantly interfered with the public's health, safety, peace, comfort, and/or convenience.

94. The Releases and Contamination were proscribed by law.

95. The Releases and Contamination were known, or should have been known, by Old GM to be of a continuing nature which produced permanent or long-lasting significant effect on the public's rights.

96. Plaintiffs were uniquely harmed by the public nuisance, because their groundwater sources had been polluted, they sustained real and personal property damage as a result of the corrosive nature of the water, and they suffered adverse health effects.

97. Plaintiffs have incurred legal expenses as a result of Old GM's fraudulent and unlawful conduct.

COUNT VIII – VIOLATION OF NREPA PART 201
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

98. Plaintiffs incorporate by reference the foregoing allegations.

99. As of the Sale Date, Defendant owns and operates the MPG.

100. As of said time and place, Defendant has caused the Releases and the Contamination without a permit to do so.

101. On October 13, 2014, Defendant communicated the Notice of Migration in which Defendant expressly or implicitly acknowledged:

a. Defendant is the owner and operator of the MPG.

b. The MPG is a "facility" within the meaning of MCL 324.20101(s).

c. Sodium and chloride are hazardous substances.

d. The sodium and chloride Contamination is migrating in a south and southwesterly direction, towards the Plaintiffs' residences.

102. As the owner and operator of the MPG facility, Defendant was required to notify MDEQ and Plaintiffs within 30 days after obtaining knowledge that the release has migrated and "immediately stop or prevent an ongoing release at the source."

103. Furthermore, MCL 324.20107a required Defendant to exercise due care with respect to the contamination emanating from the MPG by undertaking response activity necessary to mitigate unacceptable exposure to hazardous substances.

104. Defendant failed to fulfill its obligations under Part 201 of the Michigan Natural Resources and Environmental Protection Act ("NREPA").

105. Defendant is liable for costs and damages pursuant to MCL 324.20126 and 20126a for the Plaintiffs' costs of response activities and damages for the full value of injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing the injury, destruction, or loss resulting from the release.

106. Defendant is strictly liable for cleanup costs after the Sale Date, under MCL 324.20126 due to its failure to obtain a Baseline Environmental Assessment within the meaning of MCL 324.20101(f).

107. As a direct and proximate result of Defendant's Releases and Contamination, Plaintiffs have suffered irreparable harm inasmuch as the groundwater used by Plaintiffs has been polluted, impaired and rendered unusable.

108. Plaintiffs have incurred, and will incur, response activity costs for which Defendant is responsible for reimbursement.

109. On November 29, 2017, pursuant to MCL 324.20135(3), Plaintiffs notified Defendant, the MDEQ, and the Michigan Attorney General, that they would be seeking relief under Part 201.

COUNT IX – VIOLATION OF MICHIGAN ENVIRONMENTAL PROTECTION ACT
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

110. Plaintiffs incorporate by reference the foregoing allegations.

111. Plaintiffs assert this cause of action under the Michigan Environmental Protection Act ("MEPA") for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction.

112. Through the Releases and Contamination, Defendant has polluted, impaired and, for all practical purposes, destroyed, the groundwater beneath Plaintiffs' property from the Sale Date through the present.

113. Defendant's ongoing Releases continue to pollute and threaten the usability of the groundwater beneath Plaintiffs' property.

114. Equity requires that Defendant be enjoined from further Releases into the environment that would pollute, impair and/or destroy the groundwater beneath Plaintiffs' property.

COUNT X – FRAUD
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

115. Plaintiffs incorporate by reference the foregoing allegations.

116. Defendant had actual knowledge that the Contamination was migrating off-site since the day it took possession of the MPG on the Sale Date because the previous owner, Old GM, had actual knowledge that the Contamination was migrating off-site since 1985 at the latest.

117. Despite its actual knowledge of the Contamination migration, Defendant failed to notify Plaintiffs and those similarly situated of the Contamination from the Sale Date to October of 2014 when Defendant issued the Notice of Migration.

118. Defendant concealed its knowledge of the Contamination migration by knowingly and affirmatively making spurious assertions that the MPG was not the source of the Contamination and that groundwater flowed in a south to southeast direction from the MPG.

119. Defendant made its representations to MDEQ and others with actual intent to defraud, or at least with reckless disregard for the truth and as positive assertions.

120. As a direct and proximate result of Defendant's fraud, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property and premature obsolescence due to corrosion;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

121. Under the circumstances, exemplary damages are appropriate to rectify Defendant's wrongful conduct.

COUNT XI – NEGLIGENCE
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

122. Plaintiffs incorporate by reference the foregoing allegations.

123. Defendant has duties to:

a. Refrain from polluting the environment and, specifically, from discharging into the waters of the State of Michigan a substance that is or may become injurious to the public health, safety or welfare, or domestic use of such waters.

b. Report ongoing releases to MDEQ and notify Plaintiffs and those similarly situated that the Contamination impaired the public health, safety or welfare, or domestic use of such waters, and that the Releases had migrated from the MPG to groundwater beneath Plaintiffs' property.

c. Prevent ongoing releases of hazardous substances into the groundwater and/or diligently pursue remediation of same.

d. Take action to mitigate Plaintiffs' unacceptable exposure to hazardous substances.

124. Defendant breached its duties by:

a. Causing the Releases and the Contamination.

b. Failing to report the Releases and Contamination to MDEQ, and to notify Plaintiffs and those similarly situated.

c. Failing to prevent ongoing releases of hazardous substances into the groundwater and/or diligently pursue remediation of same.

d. Failing to take action to mitigate Plaintiffs' unacceptable exposure to hazardous substances.

125. As a direct and proximate result of Defendant's breaches of duties from the Sale Date through the present, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property and premature obsolescence due to corrosion;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

COUNT XII – TRESPASS
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

126. Plaintiffs incorporate by reference the foregoing allegations.

127. The Releases by the Defendant from the Sale Date through the present constitute an unauthorized direct and immediate invasion of land over which Plaintiffs and those similarly situated at all relevant times had a right of exclusive possession.

128. As a direct and proximate result of Defendant's invasion of Plaintiffs' land from the Sale Date through the present, Plaintiffs and those similarly situated have suffered damages including, but not limited to:

a. Diminution in value of real property;

b. Damage to vegetation and landscaping;

c. Damage to personal property including, but not limited to, household appliances and plumbing;

d. Adverse health effects caused by increased sodium and chloride intake;

e. Emotional distress and mental anguish.

COUNT XIII – PRIVATE NUISANCE
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

129. Plaintiffs incorporate by reference the foregoing allegations.

130. Defendant's intentional Releases and Contamination from the Sale Date through the present have unreasonably interfered with Plaintiffs' use and enjoyment of their property.

131. As a direct and proximate result of Defendant's interference with Plaintiffs' use and enjoyment of property, Plaintiffs and those similarly situated have suffered substantial damages.

COUNT XIV – PUBLIC NUISANCE
NEW GM (FOR CLAIMS *INDEPENDENT OF* OLD GM)

132. Plaintiffs incorporate by reference the foregoing allegations.

133. The Releases and Contamination by Defendant from the Sale Date through the present significantly interferes with the public's health, safety, peace, comfort, and/or convenience.

134. The Releases and Contamination are proscribed by law.

135. The Releases and Contamination are known, or should be known, by Defendant to be of a continuing nature which produced permanent or long-lasting significant effect on the public's rights.

136. Plaintiffs are uniquely harmed by the public nuisance, because their groundwater sources have been polluted, they have sustained real and personal property damage as a result of the corrosive nature of the water, and they have suffered and continue to suffer adverse health effects.

137. Pursuant to MCL 600.3805, equity requires that Defendant's activities causing further Releases and Contamination be preliminarily and permanently enjoined.

138. Plaintiffs have incurred legal expenses as a result of Defendant's fraudulent and unlawful conduct.

WHEREFORE, Plaintiffs respectfully request that the Court:

A. Certify a plaintiffs-class of persons pursuant to MCR 3.305 consisting of:

> All persons who reside or have resided in the past 10 years in any home to which Defendant sent a Notice of Migration in or about October 2014, and who claim to have suffered damages as a result of Defendant's contamination of groundwater.

B. Enter judgment on a jury verdict for each class member in whatever amount in excess of $25,000 to which the trier of fact determines each class member is entitled.

C. Order and adjudge that the Defendant is liable for any and all cleanup costs necessary to remediate the MPG.

D. Order and adjudge that Defendant must reimburse Plaintiffs for any and all response activity costs.

E. Enter preliminary and permanent injunctions prohibiting Defendant from causing further Releases and/or Contamination at the MPG.

F. Award Plaintiffs their reasonable costs and attorney and expert fees.

G. Grant Plaintiffs such additional relief as the Court deems just and proper.

JURY DEMAND

Plaintiffs demand a trial by jury of all issues so triable.

Respectfully submitted,

CLARK HILL PLC

By: /s/ Karl J. Edward Fornell

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(*pro hac vice* pending)

Attorneys for Plaintiffs

Date: February 16, 2018

Date: February 16, 2018

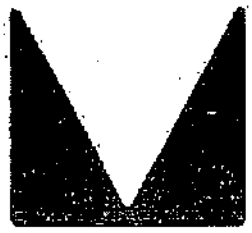
Exhibit B

GENERAL MOTORS CORPORATION

MILFORD PROVING GROUNDS

WATER SUPPLY STUDY

McNAMEE
PORTER & SEELEY
ENGINEERS ARCHITECTS



GENERAL MOTORS CORPORATION

MILFORD PROVING GROUNDS

WATER SUPPLY STUDY

Prepared by

McNamee, Porter and Seeley
Engineers/Architects
Ann Arbor, Michigan

June 1985

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The staff at the General Motors Corporation's Milford Proving Grounds has expressed concern over their groundwater supply. Planned expansion at the proving grounds will cause increased demands, and the chloride content in the existing supply is of concern. This report addresses both of these issues.

The existing water consumption and future demands are assessed in relationship to the existing facilities. A location for a new supply well is investigated. The source and extent of the chloride is studied, along with other water quality concerns. A work plan is presented for Phase II efforts to determine the exact location of a new well.

CONCLUSIONS

1. A new production well is needed at the Proving Grounds. Wells 4A and 5 provide firm capacity during current maximum day demands but cannot provide for peak demand on maximum day due to inadequate storage. Future maximum day demands can not be met with the firm capacity of the existing wells.

2. The transmission main from Wells 4A and 5 to the main building area is not looped, allowing potential for loss of all supply during repairs.

4. The military area has good recharge because of groundwater inflow from the west, south and north. No information was obtained east of the proving grounds.

5. There is good potential for a well near the test well 72-3 location. This well is close to the proving grounds border, possible interference on off-site wells was not investigated. Three locations have been chosen for further investigation.

6. Chloride levels in the existing supply wells are mainly caused by road salt infiltration into the unconfined aquifer. It is not clear whether the levels will worsen or have reached steady-state.

RECOMMENDATIONS

1. For increased water demands, a new well is needed. A program should be implemented to determine the best location for a new well taking into account potential capacity, water quality, isolation from contaminant sources, and preferred locations of General Motors representatives to fit into their development plans.

2. An evaluation should be completed on the interference of the new well on existing wells located on private property east of the Milford Proving Grounds and GM Milfords existing production wells.

3. A looped transmission system should be installed between the existing production wells, the new well, and the main building complex.

4. A remedial action plan should be developed to address the chloride contamination. It should include annual monitoring of chloride levels in wells, semi-annual monitoring of surface waters, and samples of Mann Creek during the spring snowmelt. Salt application rates should be reduced where possible. Stormwater drainage improvements should be considered if chloride levels rise.

ACKNOWLEDGEMENT

We wish to acknowledge the assistance of Mr. Bill Hawkins, Plant Engineering Manager; Mr. John Neil and Mr. Art Neparts, Plant Engineering Department; and Mr. Frank Maccioni and Ms. Carol Everett, Power Plant Dept.

Appreciation is also expressed to Mr. Harry Brown, Brown Drilling Company, and Mr. Ervin Stahl and Mr. Rodney Huff, Layne-Northern Company, for information regarding the existing production wells at the Milford Proving Grounds.

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LIST OF FIGURES AND TABLES

INTRODUCTION

The General Motors Corporation authorized McNamee, Porter and Seeley to conduct an investigation into expanding water supply capabilities at their Milford, Michigan Proving Grounds facility. This action has been taken in response to limited existing well capacity, to assure long-term system reliability, and to assess groundwater quality concerns. This report contains Phase I of the investigation, problem definition. Phase II will address the location of a new production well and completing a loop of the water transmission mains.

This study includes an analysis of the existing water consumption and projections of future demands. The existing facilities are assessed in relation to demands.

A study of the surface and subsurface conditions is undertaken to find a location for a new production well. Well logs and pumping tests are analyzed. The influence of the proposed well is determined in regard to its effect on the other production wells.

The source and extent of chloride contamination is investigated. Recommendations are made for further monitoring of the chloride levels. Other water quality data are presented.

Estimated costs are presented for a new production well compared with additional storage.

A work plan is presented for Phase II, including cost estimates and time schedule.

WATER SUPPLY

EXISTING FACILITIES

The existing water supply system consists of two production wells located near the military building, two elevated water tanks located near the main complex, a single 10-inch transmission main from the military area to the main building complex, and a 10-inch main from the main complex to the Building 42 area. These facilities, through a system of distribution mains, serve the main building complex, the military area and the Building 42 area. See Figure 1 for the facilities layout.

Both production wells have been recently redeveloped. Another production well (Well 3), drilled in 1953, was a major supply source, but because of high chloride concentrations, it is now only used for emergency supply. Chloride contamination is discussed further in this report under the Groundwater Quality section.

The current capacities for the existing production wells are shown in Table 1.

Table 1
Production Wells

Well Number	Present Capacity (gpm)	Expected Capacity (gpm)
4A	575	575
5	700	700
3*	500	500

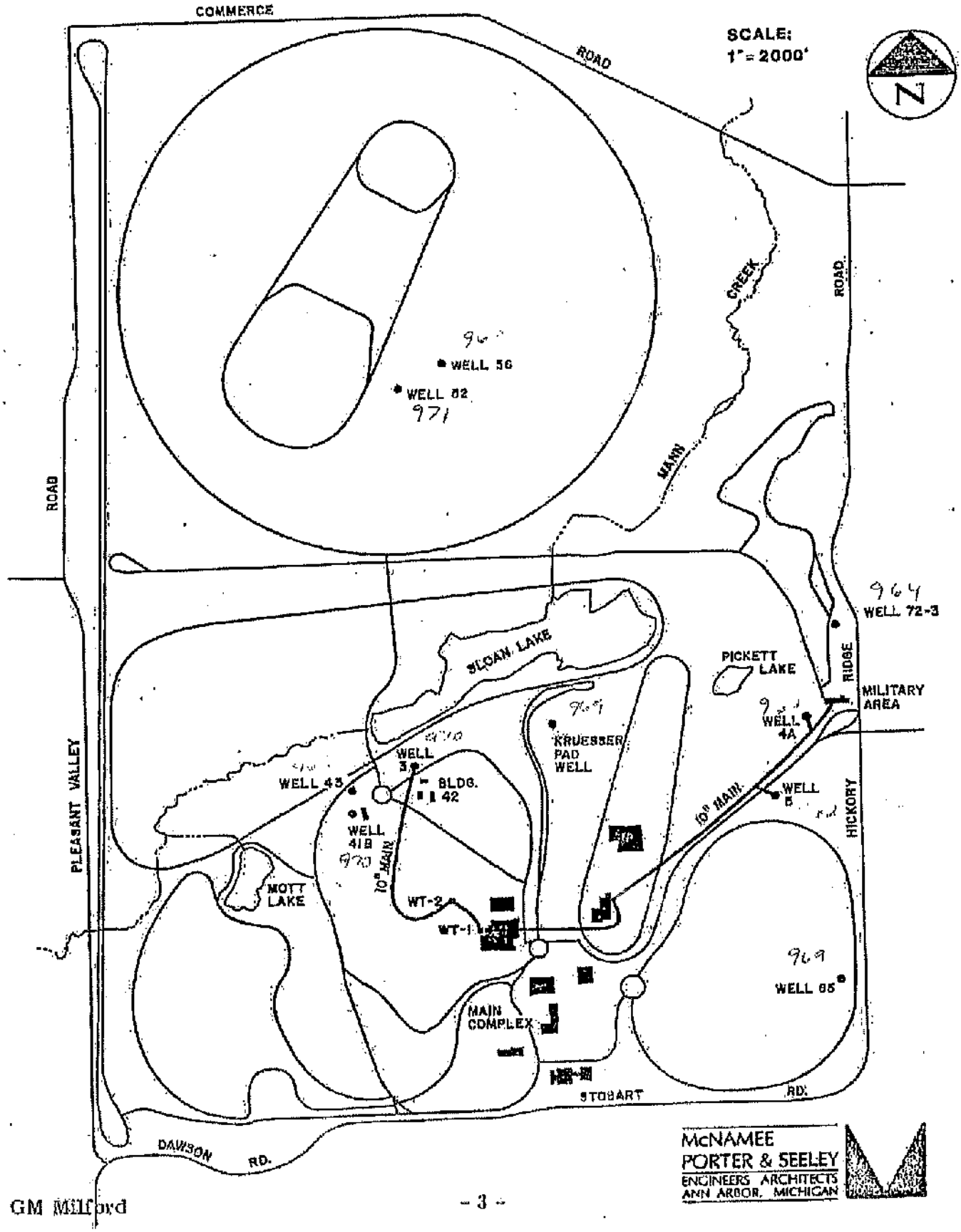
*Not available for domestic use due to high chlorides

The elevated storage tanks have a total capacity of 400,000 gallons. Table 2 summarizes the tank sizes, elevation, and available supply for domestic use.

FIGURE 1

Water Supply Facilities and

Well Locations



McNAMEE PORTER & SEELEY
ENGINEERS ARCHITECTS
ANN ARBOR, MICHIGAN

Table 2

Elevated Storage*

Tank	Ground Elevation	Capacity (gallons)	Diameter (feet)	Domestic Operating Range	Domestic Capacity (gpm)
1	1189	150,000	28	1322 - 1313	41,000
2	1193	250,000	40	1324 - 1317	66,000
Total		400,000			107,000

*Values obtained from General Motors Staff.

The remaining elevated storage of 293,000 gallons is reserved for fire flow. In addition, a 500,000 gallon underground tank with a 2000 gpm pump is used exclusively for fire flow.

Remote buildings not served by the main water supply facilities have their own small capacity wells.

EXISTING WATER SUPPLY REQUIREMENTS

Weekly pumping records for Wells 4A and 5 were analyzed for a one-year period from November 1983 to November 1984. Average daily demand was found to be 0.36 million gallons per day (mgd). This is equal to a continuous pumping rate of 250 gpm. Daily demand during the maximum week was found to be 0.49 mgd, and the maximum daily demand was estimated to be 0.72 mgd (500 gpm), utilizing a factor of 2 between average daily demand and maximum daily demand.

Storage facilities for domestic demand should be designed to handle the peak demands on the maximum day, with the average maximum day demand supplied by pumping. Assuming a sinusoidal demand curve during the maximum day, and a ratio of maximum hour to maximum day of approximately 2, the storage requirements would be equal to about 240,000 gallons. The existing domestic storage is equal to 107,000 gallons; therefore, the peak pumping demand is instead equal to 700 gpm.

The firm capacity of the production wells is currently 575 gpm after Well 5 redevelopment. Allowance should be made for decline in well capacity as previously experienced. If well maintenance and redeveloping is regularly implemented, the firm capacity should remain above 500 gpm. Firm capacity is defined as the system capacity with the largest well out of

WELL EXPLORATION

GEOLOGY AND HYDROLOGY

The General Motors Milford Proving Grounds covers approximately 4000 acres. The topography and geology is a result of the last stage of glaciation. The hilly, southern portion of the site resembles a terminal moraine. North of this, a glacial channel runs through the site, paralleling Mann Creek. The glacial deposits are in excess of 200 feet deep. Figure 2, taken from a USGS report titled "Water Resources of the Huron River Basin," shows the glacial channel and glacial thickness contours for the region. As is typical of glacial deposits, the subsurface conditions are variable, containing unsorted clay, silt, sand and gravel. The surface soils range from well-drained sands in the southern hilly area to poorly drained soils along Mann Creek.

Mann Creek drains the majority of the proving grounds, exiting near the southwest corner. Sloan Lake, the largest water body, was formed by damming up Mann Creek. There are many depression areas on the site with no outlets. The largest depression area is Pickett Lake, which has a fairly constant water level according to GM representatives. Pickett Lake has a water surface elevation of 985. Water surface elevations for Mann Creek range from 977 where it enters the proving grounds at Commerce Road, to 966 at Sloan Lake, then dropping to 946 at the outlet under Pleasant Valley Road.

WELL LOG INFORMATION

Numerous wells have been drilled at the proving grounds. Logs from the wells provide two important pieces of information: 1) the soils variability with depth, and 2) the static groundwater level.

The well logs show a complex stratification of clay, sand and gravel. In both of the areas where there are many wells (the military area and Building 42 area), there are significant differences in the thickness and location of the clay and sand layers throughout the depth of drilling activities. The usable aquifer in the military area is at a depth of 80-120 feet and ranges in thickness between 30 and 60 feet.

Table 4 summarizes the available information on static water levels. The well locations can be found on Figure 1.

service. Well 5 currently has standby generating capacity, and Well 4A is expected to have reserve generating capacity in the near future. Portable electric generators are also available at the Milford Proving Grounds.

FUTURE WATER SUPPLY REQUIREMENTS

New development at the proving grounds is expected to increase the building area from the present area of approximately 1.5 million square feet to about 2.25 million square feet, or a 50% increase. The water supply demands have been projected assuming a 50% increase in demand.

The average daily demand will be 0.54 mgd (375 gpm); the maximum daily demand will be 1.08 mgd (750 gpm); and the peak pumping demand based on the existing available storage will be 1200 gpm.

Table 3 summarizes the existing and future demands, pumping rates and storage requirements.

Table 3

Water Demands and Storage

	Existing	Future
Average Daily Demand (mgd)	0.36	0.54
Maximum Daily Demand (mgd)	0.72	1.08
Maximum Daily Demand (gpm)	500	750
Peak Pumping Demand (gpm)*	700	1200
Production Wells Firm Capacity (gpm)	575	575
Required Storage (gallons)***	240,000	360,000

*Capacity required to satisfy the peak demand with existing domestic storage.

**Required storage to equalize peak demands on maximum day with pumpage rate equal to the average maximum day.

As shown in Table 3, if the available domestic storage were increased to 360,000 gallons, the firm capacity of the two production wells (575 gpm) would not meet the future maximum daily demand (750 gpm), at the full 50% increase in development. Because of this, a new well is the only viable alternative. The costs of added storage versus the cost of a new production well is presented in this report under Water System Alternatives for reference.

FIGURE 2

Glacial Geology

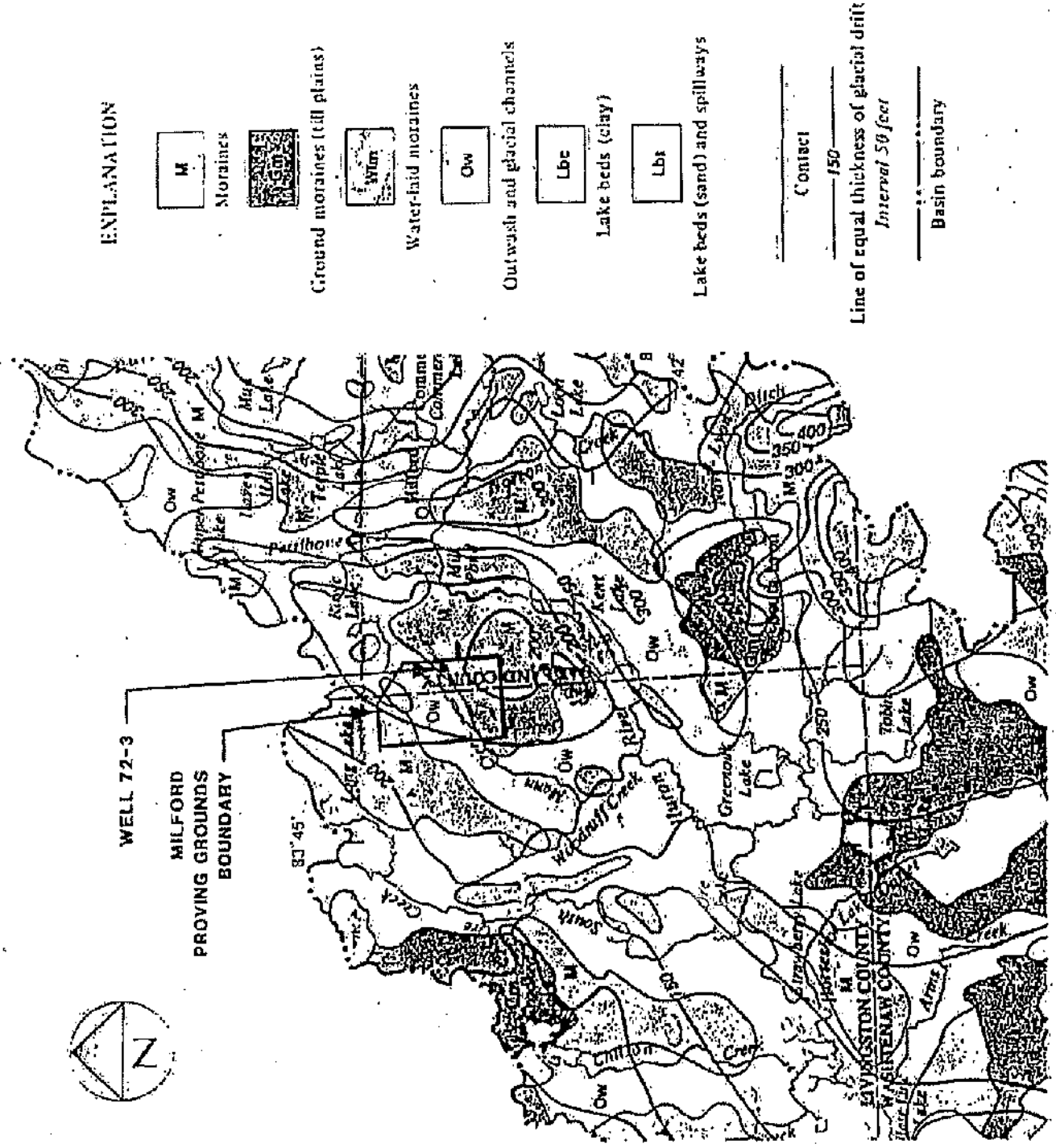


Table 4

Static Water Levels*

Well Number	Year Measured	Static Water Elevation
3	1953	970
4A	1983	964
5	1974	962
41B	1976	970
43	1976	968
Kruessem Pad	1974	969
52	1968	971
56	1978	969
65	1968	969
72-3	1972	964

*Values obtained from General Motors staff.

From this information and surface water elevations, some conclusions can be drawn about groundwater flow directions.

1. A groundwater divide runs north-south through the Building 42 area.

2. Pickett Lake seems to be perched, meaning its water surface is above the general groundwater level in the area. This situation is usually caused by a continuous clay layer under the lake.

3. Groundwater flows towards the military area from the north, south and west. No information was obtained for private property east of the proving grounds.

HISTORICAL PUMPING AND TESTS

Well 4 was installed in 1964 and has been used as a production well since then. The pump test (see Appendix B) conducted in 1964 predicted a sustained yield of 1150 gpm. Once operational, considerable well losses made frequent redevelopment necessary. In 1975, a new well (Well 4A) was drilled next to Well 4 and is the current production well. Concurrently, GM staff conducted an investigation to locate a new production well. Test wells were drilled in

1969 and 1972. Two wells drilled near Well 4 in 1969 did not penetrate a usable aquifer, reaffirming the variability in this geologic deposit. In 1972, seven different test holes were drilled within 2000 feet of Building 12. Two of the holes again did not penetrate the aquifer. The other wells showed more promise. Two wells were located near the present Well 5. An aquifer test was conducted on December 17, 1972 by Brown Drilling Company. This test lasted six hours, pumping at a rate of 68 gpm. Yield at this location was estimated at 600 gpm.

Three other wells were located about 1000 feet north of the military building. On May 16 and 17, a 24-hour aquifer test was conducted by Brown Drilling Company of Howell. Well 72-3 was pumped at 290 gpm and two other wells used for observation; located 50 feet and 200 feet from the pumped well. Yield was estimated at 1000 gpm. The drawdown behavior during the test indicated that the aquifer was receiving recharge. The consultants, W. G. Keck and Associates, assumed that this was due to the drawdown cone encountering unconfined conditions, even though the well logs showed a confining layer. With more observation wells, and with some of their screens placed in higher formations, this could have been more accurately investigated. Typically, aquifer tests for unconfined aquifers should be run more than 24 hours; with 3 days being common to assess the influence of aquifer boundary conditions.

RADIUS OF INFLUENCE

Locating a production well near the Well 72-3 location has the following advantages:

1) The aquifer showed good potential in the June 1972 test.
2) The well receives groundwater recharge from three directions.
3) The well is close to the glacial channel (see Figure 2).
4) The well is near an existing transmission main.

From the above information, we have concluded that Well 72-3 is a good potential site for a new production well. Based on aquifer coefficients estimated by Keck, and observed

drawdowns, the influence of this well on the other production wells would be as follows:

Pumping Rate (gpm)	Duration (days)	Drawdown at Well 4A (ft)	Drawdown at Well 5 (ft)
312	1	3	2.5
312	100	6	5
625	1	6	5
625	100	11	10

This analysis used the Jacob Method, assuming no recharge (see Appendix E). The reduction in capacity of Well 4A or 5 with a production well at 72-3 pumping at 625 gpm would be approximately 10% for a 1-day duration and 20% for the 100-day duration.

Because of the fact that wells located east of the proving grounds could experience a reduction in capacity, and the 72-3 area receives heavy military traffic, three locations that fit in better with GM development plans have been chosen for further investigation.

ISOLATION

According to the Michigan Department of Health Act 399, Type IIa water supplies must be isolated 200 feet from storm and sanitary sewers, pipelines, septic tanks, drainfields, dry wells, cesspools, seepage pits, leaching beds, surface water, or other area from which contamination of the groundwater may occur. They must be located 2000 feet from any major source of potential contamination. Major sources include large scale waste disposal sites, land application of sanitary wastewater or sludges, sanitary landfills, and chemical or waste chemical storage or disposal facilities. Modifications may be authorized by the MDPH based on a hydrogeological study showing limited hydraulic connection between the contamination source and the well screen.

GROUNDWATER QUALITY

CHLORIDE CONTAMINATION

Concern has developed at the Milford Proving Grounds over increased levels of chloride in the production well supply over the past 10-15 years. In Well 3, the present chloride concentration is 600 milligrams per liter (mg/l), compared to the Environmental Protection Agency's National Secondary Drinking Water Regulations of 250 mg/l. Well 3 is not presently used for domestic supply.

Chloride concentrations at Well 4A (and previously Well 4) have increased from a level of 50 mg/l in 1967 to a present concentration of 200 mg/l. At Well 5, chloride has increased from 30 mg/l in 1974 when it was put into service, to a present concentration of 160 mg/l. In both Wells 4A and 5, the concentrations have remained steady since 1976.

Chloride concentration measurements have also been taken at Sloan, Mott and Pickett Lakes, Mann Creek, and at Wells 43, 56, 65 and the Kruesser Pad Well. These concentrations are shown in Table 5 for all the years of record.

There are four possible sources of the chlorides found in the production wells: 1) road salt used for ice control on paved roads, 2) calcium chloride used for dust control on dirt roads, 3) wastewater effluent, and 4) salt contained in geologic deposits.

Road Salt

Road salt appears to be a major source of chloride at the proving grounds. Approximately 10,000 tons of salt is used each year on the 120 miles of paved roads and parking lots. The salt drains off the roads and becomes part of the stormwater flow. The salt is readily dissolved into the stormwater.

Stormwater that enters the surface water drainage system that is tributary to Mann Creek leaves the proving grounds with the dissolved chloride. There is retention in Sloan Lake providing opportunities for the chloride to enter the groundwater system because of the groundwater gradient from Sloan Lake to the military area.

Table 5

Chloride Concentrations (mg/l)*

Location	Year											
	1967	1973	1974	1975	1976	1978	1980	1981	1982	1983	1984	1985
Well 3		350				200		485**		590**	600	
Well 4A	50	120		170	230	200		210			200	
Well 5			30	150	170	160		180			160	
Well 43								17			15	
Well 56								5			4	
Well 65								9			9	
Kruesser Pad Well											50	
Mott Lake							500					480
Mann Creek Entering Property							12		21	21	17	25
Mann Creek Leaving property						270	240	240	220**	260	300	240
							210			150		
Sloan Lake Outlet											404	
Pickett Lake												

*Values obtained from General Motors staff
**Average of two measurements

Some of the chloride-laden stormwater in the Mann Creek system does infiltrate into the ground before it reaches the creek. The amount of chloride that infiltrates by this process is lessened because the highest concentration storm flows are in the spring. At this time of year, the ground can be still frozen, eliminating infiltration.

The areas that provide a greater opportunity for chloride entering the groundwater are the depession areas. Stormwater tributary to these areas does not leave the site, and is therefore of greater concern. The Pickett Lake area (see Area B on Figure 3) is the largest depression area and includes runoff from roads and parking lots in the main complex and near the military buildings. Drainage Area C includes several depression areas north of the military area. Drainage Area D flows to a depression area just east of the proving grounds. There are also several smaller depression areas scattered about the Milford Proving Grounds. Drainage Area A is tributary to Sloan Lake. Table 6 summarizes the drainage areas.

Table 6

Stormwater Drainage

Drainage Area	Area (acres)	Percent	Drains to:
A	820	21	Sloan Lake
B	210	5	Pickett Lake
C	130	3	Retained On-site
D	90	3	Retained near site
E	320	8	Off-site
F	340	9	Mott Lake -- Mann Creek
G	2000	51	Mann Creek
Total	3910	100	

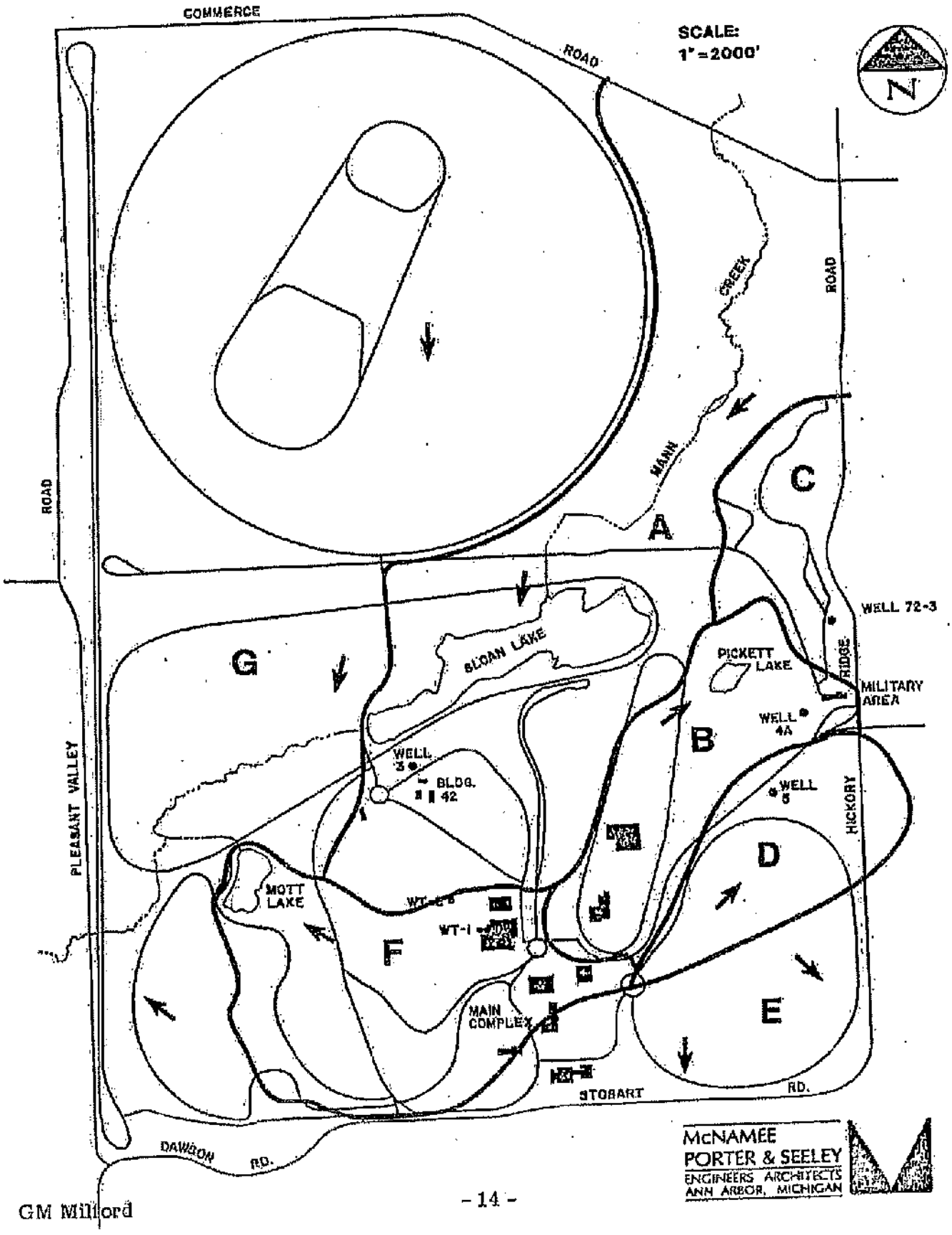
Another possible source of well contamination is direct discharge of stormwater into the well along the casing.

Chloride Transport

Once entering the groundwater, contaminant transport is affected by advection, dispersion, and chemical reactions. Advection refers to the transport of the contaminants at the same speed as the average linear velocity of the groundwater as determined from Darcy's Law. Dispersion is caused by deviations from the average linear velocity which cause contaminants to spread both laterally and longitudinally. Chemical reactions include decay and adsorption, which both tend to slow the contaminants' transport.

FIGURE 3

Stormwater Drainage



GM Milford

Chloride is not affected by chemical reactions, and dispersion is small compared to advection. Therefore, we can assume that the chloride will travel in the same direction and speed as the groundwater.

Based on the available data, the approximate velocity of groundwater, and hence chloride, from the Building 42 area to the military area would be 100-ft./year. Therefore, the chloride contamination found in Well 3 would take about 50 years to reach the military area. This slow rate of travel focuses location of the source of the chloride in Wells 4A and 5 closer to the military area. Pumping tests indicated that the usable aquifer in the military area is not confined. Therefore, groundwater can migrate down to the lower aquifer. The drawdown caused by the wells will accelerate this process.

Calcium Chloride

Approximately 7 tons of chloride is applied on the dirt roads for dust control. Although this is a much smaller quantity than the salt applications, it is mainly used in the military area, close to the production wells.

Wastewater Effluent

The wastewater discharge into Mott Lake provides another source for chloride. Because of its location, this should not influence the chloride levels in the production wells.

Salt in Geologic Deposits

There is a possibility that there could be natural deposits of salt migrating toward the production wells due to the pumping.

Remedial Action

Monitoring of the chloride levels in wells and surface waters can further delineate both the extent and concentrations of the chloride plume. Based on the leveling off of chloride levels in production wells 4A and 5, it is possible that the concentrations have reached a steady level. Any new wells drilled at the site should be checked for contamination. Mann Creek should be monitored in the spring to determine how high the concentrations are during the peak salt-laden stormwater runoff. With this data, an estimate could be made of the total chloride leaving the proving grounds. Salt usage should be examined to determine if lesser amounts could be used, especially in those areas tributary to the military area.

WATER QUALITY

Table 7 lists chemical analyses conducted at Wells 4A and 5 on September 13, 1984, along with the National Drinking Water Standards.

Table 7

Production Well Water Quality*

Contaminant	Well 4A	Well 5	Maximum Permissible Contaminant Level
Arsenic, mg/l	0.005	0.009	0.05
Barmium, mg/l	0.3	0.3	1.0
Cadmium, mg/l	0.01**	0.01	0.01
Chromium, mg/l	0.02**	0.02**	0.05
Lead, mg/l	0.05**	0.06	0.05
Mercury, mg/l	0.0005**	0.0005**	0.002
Selenium, mg/l	0.005**	0.005**	0.01
Silver, mg/l	0.02**	0.02**	0.05
Endrin, mg/l	0.0002**	0.0002*	0.0002
Lindane, mg/l	0.004**	0.004**	0.0044
Methoxychlor, mg/l	0.1**	0.1**	0.1
Toxaphene, mg/l	0.005**	0.005*	0.005
2, 4-D, mg/l	0.1**	0.1**	0.1
2, 4, 5-TP, mg/l	0.01**	0.01**	0.01
			Recommended Concentration Limit
Chloride, mg/l	200	160	250
Color	10	30	15
Copper, mg/l	0.02**	0.02**	1.0
Iron, mg/l	1.0	1.9	0.3
Manganese, mg/l	0.02	0.04	0.05
Odor, Ton	0	0	3
pH	7.11	7.13	6.5 - 8.5
Sulfate, mg/l	37	37	250
TDS, mg/l	860	608	500
Zinc, mg/l	0.02**	0.54	5

NOTE: Recommended Concentration Limits for these constituents are mainly to provide acceptable aesthetic and taste characteristics.

*Values from a Clow Corp. Analyses conducted on Sept. 13, 1984.
**less than

TREATMENT

The existing treatment at the Milford Proving Grounds consists of softeners and filters for sediment removal before entering boilers and cooling water systems. Manganese sand filters are used at remote wells for iron removals.

Centralized iron removal could be effectively accomplished through a combination of aeration (oxidation) and filtration. An elevated pH and sufficient detention time are critical elements to achieve desired finished water quality. Depending on the relative portions of ferric and ferrous iron present, the pH must be controlled in the range of 7.0 to 10.5 units. Pilot scale study should be conducted to identify the optimum pH conditions and establish chemical feed requirements. Sufficient detention time is necessary, following aeration, to complete the iron oxidation process. A 30-minute detention period is generally maintained to improve removal efficiency and provide consistent finished water quality.

Two aeration alternatives are available, pressure aeration and induced draft waterfall aeration. Pressure aerators are mounted in-line avoiding the need for double pumping. Their application is generally used for iron concentrations less than 1.5 ppm due to limited oxygen transfer capabilities. Close control of the air supply is essential to avoid "white water" conditions and increased corrosion potential. Pilot scale study is important with pressure aeration devices to insure treatment performance and reduce maintenance risks.

Induced draft waterfall aeration is currently practiced at many iron removal facilities. This approach transfers oxygen to the raw water using a cascade effect with air supplied by an induced draft fan. Several advantages are offered by this aeration process. Oxidation reactions are more efficient and dissolved oxygen is released prior to reaching the distribution system. Volatile organic compounds are effectively oxidized, reducing potential taste and odor concerns. Carbon dioxide and hydrogen sulfide gases, if present, are stripped from the raw water making the finished water supply less aggressive.

A detention tank should immediately follow the aeration step. A 30-minute contact time is recommended to insure complete oxidation of iron compounds present.

After filtration, finished water supply must be disinfected prior to reaching the domestic supply. Gas chlorination is the preferred method for both operational simplicity and initial capital cost investment.

A water softening plant can also be utilized to remove high iron contents from groundwater supplies. Treatment for softening generally includes lime addition, which raises the pH, thereby permitting the iron oxidation to be completed. The precipitated iron is coagulated with the lime added and a significant amount is settled prior to filtration.

Chlorides can be removed from water by anion exchange, or the physical process of evaporation or reverse osmosis. Typically, these alternatives are not cost-effective compared with finding an alternate source of water supply.

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WATER SUPPLY ALTERNATIVES

COST COMPARISON

Costs for a new production well are compared with the costs for added above-ground storage. The costs presented are based on an Engineering News Record (ENR) Index of 4200. The costs do not include engineering.

16-inch Production Well**

16-inch Boring and Casing 160-ft.	$ 13,000
Well Development	4,000
Screen, Fittings, and Points	6,000
Test Pump Operations (3 day plus step test)	7,000
Pump (600 gpm)	30,000
10" Transmission Main (1000 ft.)*	30,000
Hydrogeological Report	5,000
Total	$ 95,000

Storage Tank

260,000 gallons, 100-ft. high @ $1.50/gallon	$390,000

*Connection between the proposed well and existing transmission

**The estimate of cost assumes a submersible pump and pitless adapter. Should a well house be required, an additional cost of $60,000 can be expected.

PHASE II
LOCATION OF NEW PRODUCTION WELL

OBJECTIVES

This investigation will identify the location for an additional production well. Three locations will be investigated (see Appendix F for letter and map showing locations preferred by GM Representatives).

- Inside Truck Loop
- Inside 7.2% Test Hill Loop
- Adjacent to Paddock Road

Site selection is to consider aquifer capacity, water quality and isolation from potential contaminant sources. The desired well capacity is 500 to 600 gpm, providing for capacity for the future peak pumping demands. Water quality consistent with Federal Primary and Secondary Drinking Water Standards is considered essential.

The following work plan is presented to outline the major elements for the Groundwater Exploration Phase. An estimate of cost and project schedule are also included to aid in General Motors Corporation planning efforts.

WORK PLAN

1. Drill exploratory wells at each of the preferred sites using rotary methods. Holes should be 4-1/2-inch in diameter. Collect soil samples and complete analysis of water bearing formations.

2. Conduct electric and/or gamma ray logging at the exploratory wells to further define the potential of water bearing formations. Significant electric interference would favor the gamma ray logging method.

3. Complete the wells with 2-inch PVC casing and stainless steel screens to be used as permanent monitoring wells.

4. After well development, collect and analyze water samples from each exploratory well to assess conformance with Federal Primary and Secondary Drinking Water standards. Duplicate samples are proposed to improve data quality assurance.

5. From the initial data, complete an assessment of site potential and submit a recommendation of site selection for further testing.

6. Install a test well at the selected site to conduct test pumping. Either a 6-inch or 16-inch well will be installed depending on the degree of confidence for production well capability. The existing exploratory well will be utilized for observation purposes, and an additional 2-inch observation well will be installed to permit detailed water table monitoring necessary to assess aquifer potential.

7. After well development, conduct a step test to provide an initial determination of aquifer capacity and determine well screen losses.

8. Conduct a 3-day extended pumping test at design capacity to evaluate aquifer capacity and boundary conditions.

9. With the observed drawdown and recovery data, complete an evaluation of well capacity considering long term safe yield under a no recharge condition. Interferences from existing production wells will be evaluated.

10. Complete preliminary route selection for water supply transmission mains to connect with the existing distribution system. Consideration will also be given to complete the transmission main loop which would strengthen the supply reliability.

11. Prepare a written report summarizing our findings, conclusions and recommendations. The report would include the basis of design and opinion of construction costs for recommended improvements.

12. Prepare a detailed work plan and estimated cost for design (Phase III) and construction (Phase IV) of the production well, well house and transmission mains. We acknowledge that the well house may be excluded if submersible well pump design is desired.

ESTIMATED COST

A summary of estimated costs is presented for the proposed work plan:

Item	Estimated Cost
Exploratory Wells (3 - 2")	$ 13,000
Test Well (16")	34,000
Observation Well (2")	4,000
Laboratory Analysis	3,000
Engineering Investigation	21,000
Estimated Project Phase II Cost	$ 75,000

We suggest that exploratory and test well work be awarded on the basis of formal quotations from licensed well drillers. Preparation of bidding documents and coordination of the work is included under our Engineering Investigation. Bidding documents would be prepared in accordance with General Motors Corporation purchasing requirements. These efforts would be included as subconsultant services under our engineering agreement.

An independent testing laboratory would be selected for the water quality analysis. These services will be arranged directly by our office. We would consult General Motors staff to determine the acceptability of the proposed testing laboratory.

A task oriented manpower estimate is included as Table 8 to indicate our expected level of effort for key personnel assigned to the project.

PROJECT SCHEDULE

The Phase II Project Schedule is included as Table 9 to outline the relationship of each task. We suggest this phase be authorized prior to July 1, 1985 to enable construction completion during 1986.

Exhibit C

STATE OF MICHIGAN

REPLY TO:

SHIAWASSEE DISTRICT OFFICE
10660 BENNETT DRIVE
MORRICE MI 48857-9792

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: http://www.deq.state.mi.us

RUSSELL J. HARDING, Director

October 2, 1997

Mr. Tom Ramos, Sr. Env. Engineer
GM - North American Operations
Validation/QRD Center
General Motors Proving Ground
483-323-206
Milford, MI 48380-3726

Dear Mr. Ramos:

As you know, the Michigan Department of Environmental Quality (MDEQ) is investigating a sodium and chloride groundwater contamination in the area of Sections 13,14,23 and 24 (possibly others also) of Brighton Township in Livingston County. Samples of numerous residential wells in this area was conducted in May, 1997, by the MDEQ. Enclosed please find copies of the results from this sampling.

Groundwater in this area is known to flow southwesterly. At a meeting we both attended in May, 1997, an Oakland County Health Department representative stated groundwater quality upgradient of the GM Proving Grounds typically has chlorides of 35ppb to non-detect. As you can see from the sample results, it appears that a source of sodium and chlorides may therefore emanate from the GM Proving Grounds facility.

In your June 13, 1997, letter you indicated General Motors would investigate if any chloride or sodium sources exist or historically existed at the Proving Grounds. Has this investigation had been conducted and were any conclusions derived from this investigation? Please submit an update on this investigation to this office by October 31, 1997.

If you have any questions, please feel free to contact me.

Sincerely,

Beth Vens

Beth Vens
Environmental Quality Analyst
Environmental Response Division
517-625-4623

BV:jah
enclosure
cc: Joe Lavato, WSD

EQP 0160a
(Rev. 10/96)

Exhibit D

CONFIDENTIAL

For DEQ Use Only
ITS #:
Site ID #:
Category Code:

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION AND REDEVELOPMENT DIVISION

NOTICE OF MIGRATION OF CONTAMINATION (FORM EQP4482 REV. 3/14)

(Under the authority of Part 201, Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, (NREPA) and the Rules promulgated thereunder)

An owner or operator of property that is a facility, and/or who is subject to MCL324.20107a, and who has reason to believe that a hazardous substance is emanating from, has emanated from, or is likely to be emanating from the property and migrating beyond the boundaries of the property that he or she owns or operates is required under R 299.51017(1) and MCL 324.20114(1)(b)(ii) & (iii) to notify the Michigan Department of Environmental Quality (DEQ) and affected property owners. Submission of this notice does not fulfill the notification requirements of MCL 324.21309a.

The notice must be provided within 45 days (MCL 324.20107a) or within 30 days (MCL 324.20114) after the owner or operator has reason to believe that hazardous substances have migrated, or are likely to have migrated, to or beyond the boundary of his or her property (see R 299.51017 for exceptions that apply to parties subject to MCL 324.20107a).

Use of this form is mandatory for the notice required by R 299.51017(1) and may also be used by parties subject to MCL 324.20114(1)(ii) & (iii). This form may also be used to provide notice to affected property owners as required by those rules.

If a person holds a permit for an oil and gas well under Part 615, Supervisor of Wells, of the NREPA and there is a release from the oil and gas exploration or production activities, that person shall give notice to the DEQ and to the owner of the surface rights of the property.

If a person holds an easement and there is a release from the easement holder's activities, that person shall provide notice to the DEQ and to the grantor of the easement, or the grantor's successor in interest, if any.

Completing this notice in no way relieves a person who is subject to MCL 324.20114 from the responsibility to undertake required response activities.

This notice must be sent to the DEQ office that serves the county in which the property is located. A list of DEQ offices is available at www.michigan.gov/bea, or by calling the Remediation and Redevelopment Division's Lansing office at 517-284-5187. The DEQ will not prepare acknowledgement of receipt of these notices. The sender is responsible for sending the report using a method that provides proof of delivery if such proof is desired. Please label the outside of the envelope "Migration Notice." Additional guidelines for the compliance with the requirements of R 299.51017(1) or MCL 324.20114(1)(ii) & (iii) are available at www.michigan.gov/bea.

THIS NOTICE IS PROVIDED PURSUANT TO: **R 299.51017** ☒ **MCL 324.20114(1)** ☒
(check both, if applicable)

Please provide the following information as completely as possible.

1. Name and location of the property that hazardous substances are emanating from:

Name: General Motors Milford Proving Ground
Address: 3300 General Motors Road
Location:
City/County: Milford/Livingston & Oakland
Property Tax Identification Number, or if applicable, the ward and item number: See Attachment 1

2. Status relative to the property: (Check one or both, as applicable.)

Owner ☒
Operator ☒

Latitude (decimal degrees): 42*34'8.67"
Longitude (decimal degrees): -83*40'29.41"

Reference Point for Latitude and Longitude:
Center of Site: ☐ Main/front door: ☐ Front gate/main entrance: ☒ Other: ☐

Collection Method: Survey: ☐ Interpolation: ☐ GPS: ☒

RECEIVED
OCT 1 3 2014
MDEQ-RD
LANSING DISTRICT OFFICE

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION AND REDEVELOPMENT DIVISION

2. Provide any additional ID numbers associated with the property (e.g., EPA ID No., BEA No., Part 213 facility ID No., etc.):
Part 213 facility ID No. 00016141, EPA ID No. MID082220757

3. Name, address, and telephone number of the property owner, operator, or other party submitting the notice:
Name: William McFarland, General Motors LLC
Address: 30200 Mound Rd MC: 480-111-1N
City/State: Warren, Michigan
Telephone number: 586-947-8666

4. Name, address and telephone number of a contact person familiar with the content of the notice:
Name: Cheryl Hiatt
Address: 30200 Mound Rd, MC: 480-111-1N
City/State: Warren, Michigan
Telephone: 313-510-4328

5. If this Notice is provided pursuant to R 299.51017, provide the address and other location information for the *adjacent* property(s) onto which contamination is migrating, has migrated, or is likely to migrate.

If this Notice is provided pursuant to MCL Section 324.20114(1), provide the address and other location information for *each* property onto which contamination has migrated. Notice should be sent to the property owner of record. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (e.g., a prison, state park, etc.). Notices to the Michigan Department of Transportation (MDOT) for state owned roadways should be sent to Contaminated Site Specialist, Environmental Services Section, MDOT-Bureau of Development, 425 W. Ottawa Street, P.O. Box 30050, Lansing, MI 48909. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (i.e. a prison, state park, etc.).

dress: See Attachment 2 — Notified? No ☐ Yes ☒ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☒ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☒ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

ach additional pages as needed)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION AND REDEVELOPMENT DIVISION

6. Complete the Table on Page 3 of this Form for each hazardous substance which has migrated, or is likely to have migrated, beyond the property boundary at a concentration that exceeds a Generic Residential Cleanup Criterion developed by the DEQ pursuant to MCL 324.20120a(1). Complete and attach additional copies of Page 3, if necessary, to list all hazardous substances that must be reported. Include a scaled map or drawing that shows the location of sampling points identified on the Table on Page 3, the property boundaries, and the adjacent property owners if providing notice pursuant to R 299.1017(1) or all impacted property owners if providing notice pursuant to MCL 324.20114(1).

7. Provide a summary of the information which shows that contamination is emanating from, or has emanated from, and is present beyond the boundary of the source property at a concentration which exceeds the generic residential criteria developed by the DEQ pursuant to MCL 324.20120a(1)(a). This summary shall identify the environmental media affected, specific hazardous substances, and the concentrations of those hazardous substances in all affected environmental media at the property boundary and in any sample locations beyond the property boundary. The summary shall also describe the basis for the conclusion that the contamination is emanating, has emanated, or is present beyond the boundary of the source property, including whether the conclusion is based on groundwater analytical data or fate and transport modeling, both, or neither.

8. If the person making this notice has reason to believe that a migrating hazardous substance has affected, or is likely to affect, a private or public water supply, then that water supply must be identified here:

Private supply - See Attachment 2

	YES	NO
9. Is this notice being submitted within the timeframes established under R 299.51017 and/or MCL 324.20114(1), as applicable?	☒	☐
10. Is this notice in addition to a notice that was submitted prior to *December 21, 2002*? (R 299.51017(4)(c))	☐	☒
11. Is this notice related to an oil and gas well permit (R 299.51017(2))? Permit #:	☐	☒
12. Is this notice related to an easement (R 299.51017(3))? (NOTE: All easement grantors *must* receive this notice.)	☐	☒
13. Has surface water been affected (R 299.51017(1))? (If yes, please identify the affected surface water body.)	☐	☒

CERTIFICATION:

With my signature below, I certify that I am the owner of the facility or that I am legally authorized to execute this notice on behalf of the owner or operator named on this form, and that to the best of my knowledge and belief the above representations are complete and accurate. I understand that intentionally submitting false information to the DEQ is a felony and may result in fines up to $25,000 for each violation.

Signature _____ Date October 9, 2014
(Owner or person legally authorized to bind the person making this report)

Name (Typed or Printed) William I. McFarland

Title (Typed or Printed) Director, GM Remediation Team

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION AND REDEVELOPMENT DIVISION

See Item 6 on Page 2 of this Form for instructions to be used in completing this Table. Attach additional pages if necessary. The information to be included in each column of the Table is:

Column A — Name of hazardous substance.
Column B — Chemical Abstract Service (CAS) Number for the hazardous substance.
Column C — Maximum hazardous substance concentration measured on the property, expressed in parts per billion (e.g., ug/L or ug/Kg). Report maximum concentration separately for each environmental medium.
Column D — Sample location for Column C (relate to label on map).
Column E — Environmental medium in which concentration reported in Column C was measured (e.g., soil or groundwater).
Column F — Distance from point of maximum measured concentration (Column D) to property boundary, in direction of contaminant migration, if direction is known or can reasonably be inferred. If direction is unknown, list distance to nearest property boundary.
Column G — Direction of contaminant migration, if known.
Column H — Concentration closest to property boundary, if known. If a concentration lower than the maximum concentration reported in Column C has been measured at a point closer to the property boundary in the direction of contaminant migration, use Column I to list the concentration that was measured closest to the property boundary in the direction of contaminant migration.
Column I — Sample location for Column H (relate to label on map).
Column J — Environmental medium for measurement reported in Column H, if applicable.

A Hazardous Substance	B CAS Number	C Maximum Concentration	D Sample Location for "C"	E Environmental Medium for "C"	F Distance to Property Boundary	G Direction of Migration	H Boundary Concentration	I Sample Location for "H"	J Environmental Medium for "H"
sodium	17341252	1800000	MW-16(10)	groundwater	750 feet	S & SW	630000	MW-23(14)	groundwater
chloride	16887006	3500000	MW-16(10)	groundwater	750 feet	S & SW	1300000	MW-23(14)	groundwater

Total Number Samples Collected: MW-23(14) - one sample; MW-16(10) - 16 samples; all part of extensive monitoring program
Total Number of Samples Exceeding Criteria: MW-23(14) - one sample; MW-16(10) - 16 samples; all part of extensive monitoring program

A scaled map or drawing showing these locations and the property boundaries must be submitted with this Notice

CONFIDENTIAL

Exhibit E

CRA

GROUNDWATER QUALITY ASSESSMENT REPORT

GENERAL MOTORS CORPORATION
PROVING GROUNDS
MILFORD, MICHIGAN

Prepared By:
Conestoga-Rovers & Associates
11100 Metro Airport Center Drive, Suite #160
Romulus, Michigan 48174
(734) 942-0909 Office (734) 942-1658 Fax

FEBRUARY 1999
REF. NO. 10617 (4)
This report is printed on recycled paper.

TABLE OF CONTENTS

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(following text)

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) conducted a groundwater monitoring event at the southwest corner of the General Motors Corporation (GM) Proving Grounds in Milford, Michigan (Site). The Site location is presented on Figure 1.1. This work was implemented, as described in the Michigan Department of Environmental Quality (MDEQ) approved Work Plan for Assessment of Sodium and Chlorides in Groundwater (Work Plan) dated August 1998, during November and December 1998 and January 1999.

This groundwater monitoring activity included vertical aquifer sampling, installation of three (3) temporary groundwater monitoring wells, groundwater static water level measurements, and groundwater sampling. Groundwater samples were collected and analyzed for dissolved sodium and total chloride. In addition to the groundwater monitoring, six (6) surface water staff gauges were installed, surveyed and measured for surface water elevations to support the evaluation of groundwater flow directions.

The following Groundwater Quality Assessment Report (Report) presents the field activities conducted and results obtained during implementation of the Work Plan. This Report is organized into the following sections:

2.0 Site Background;
3.0 Groundwater Monitoring Field Activities;
4.0 Groundwater Monitoring Results;
5.0 Surface Water Elevation Mapping; and
6.0 Summary.

2.0 SITE BACKGROUND

The Site is located along the border of Livingston and Oakland Counties and occupies approximately 4,000 acres of land (see Figure 1.1). The Site is used as a vehicle testing and development facility. Sodium and chloride were reportedly detected in groundwater on the property southwest of the Site, as described in a report prepared for the property owner (Water Supply Evaluation, Insight Environmental Services, Inc. (Insight), July, 1997). The Insight Report assumed, based on topography and surface water elevations, that groundwater flows from the Site in a southwesterly direction.

3.0 GROUNDWATER MONITORING FIELD ACTIVITIES

3.1 SCOPE OF WORK

The groundwater monitoring field activities at the Site were performed by CRA on various dates in November and December 1998 and in January 1999. These field activities included the following:

1. Vertical Aquifer Sampling (VAS) at temporary monitoring well location MW2A-98;
2. Installation of three temporary monitoring wells (MW1A-98, MW2A-98, and MW3A-98) at the locations presented on Figure 3.1;
3. Collection of static groundwater level measurements; and
4. Development, purging, and sampling of the temporary monitoring wells for laboratory analysis of dissolved sodium and total chloride.

3.2 VERTICAL AQUIFER SAMPLING

VAS was conducted pursuant to MDEQ's request at temporary monitoring well location MW2A-98 prior to installation of the monitoring well at this location. VAS was conducted at this location to evaluate the general vertical distribution of sodium and chloride within the first competent water-bearing horizon and to assess the most appropriate depth for well screen placement in the three proposed temporary monitoring wells. The VAS was conducted at the MW2A-98 location at discreet approximate 10 foot intervals to a depth of 80 feet into the water table, or 119 feet below ground surface (bgs), as presented in Table 3.1. Vertical aquifer samples were collected using a sequentially decontaminated stainless steel hydropunch to accurately ensure the integrity of the vertical aquifer samples. The hydropunch was lowered through the previously advanced 4-inch outside diameter (OD) steel casing to a discrete interval several feet below the protective casing, as pre-determined by the CRA field representative. The hydropunch was then opened and allowed ample time to capture a groundwater sample. Upon capturing the groundwater sample, a portion of each sample was field filtered through a 0.45 µm filter prior to preservation for dissolved sodium and an unfiltered aliquote was collected for total chloride. Collected groundwater samples were field monitored for pH, temperature, turbidity, dissolved oxygen, conductivity, and salinity with a Horiba™ water quality analyzer. Groundwater quality field measurements are presented in Table 3.2.

3.2.1 LABORATORY ANALYTICAL RESULTS

Eight groundwater samples and samples from two water sources used for decontamination purposes were collected during the VAS activities and submitted to Safety-Kleen (Encotec), Inc. in Ann Arbor, Michigan (Encotec) for analysis of dissolved sodium and total chloride on an accelerated turn-around time basis (less than 24 hours). In addition to the analysis completed by Encotec, split samples were submitted to General Engineering Laboratories in Charleston, South Carolina (GEL) to verify the comparability of data generated by each laboratory. The analytical results from the VAS are summarized in Table 3.3. Chain-of-custody records are presented in Appendix A. Laboratory analytical reports are presented in Appendix B.

3.3 MONITORING WELL INSTALLATION

Three temporary monitoring wells (MW1A-98, MW2A-98 and MW3A-98) were installed at the locations set forth in the approved Work Plan and as presented on Figure 3.1 to determine groundwater flow direction and to assess groundwater quality in the southwest corner of the Site.

3.3.1 INSTALLATION PROCEDURES

The three (3) pilot boreholes for the temporary monitoring wells were advanced with a 4-inch inside diameter (ID) rotosonic drill. Continuous soil sample were collected during borehole installation to accurately describe the lithology of the overburden stratigraphy. Stratigraphic logs for the temporary monitoring wells are presented in Appendix C.

The temporary monitoring wells were constructed with a 2-inch ID, number 10 slot, 10-foot long Schedule 40 polyvinyl chloride (PVC) screen installed into the water table and a 2-inch ID Schedule 40 PVC riser pipe which extended several feet above the ground surface. Well screen depth was based on evaluation of the VAS results (i.e., the depth interval with the highest dissolved sodium and total chloride). A coarse silica sand pack was installed around the screen interval to approximately 2-feet above the top of the screen. A bentonite gravel seal, approximately 2-feet thick, was installed above the sand pack. Bentonite grout was used to fill the remaining annular space from the bentonite gravel seal to three feet bgs. A graded concrete surface seal was installed to promote surface water runoff in the vicinity of each temporary monitoring well.

The borehole for MW2A-98 was installed first and advanced to a total depth of 119-feet bgs. The temporary monitoring well at this location was completed with a screen interval of 55 to 65 feet bgs (938.5 ft to 928.5 ft AMSL) on November 20, 1998. MDEQ provided oversight during the completion on the VAS at MW2A-98 and participated in on-Site discussions regarding monitoring well completion details.

The borehole for MW1A-98 was advanced to a total depth of 57-feet bgs and a temporary monitoring well was completed on November 21, 1998 with a screen interval of 45 to 55 feet bgs (927.5 ft to 917.5 ft AMSL).

The borehole for MW3A-98 was advanced to a total depth of 101-feet bgs and the temporary monitoring well was completed on November 20, 1998 with a screen interval of 91 to 101 feet bgs (913.8 ft to 903.8 ft AMSL).

All screen intervals were selected in the upper portion of the shallow aquifer based upon the VAS results at MW2A-98 and the occurrence of significant saturation in the borehole stratigraphy.

3.3.2 WELL DEVELOPMENT

The new temporary monitoring wells were developed on November 20, 1998 and November 21, 1998 utilizing a submersible water pump. Each well was developed by removing a minimum of ten well volumes until a turbidity measurement of less than 15 NTU was achieved.

3.4 FIELD MONITORING

CRA measured static groundwater levels in the three temporary monitoring wells installed on-Site. The static groundwater levels were determined by measuring the depth to groundwater in each well on dates in November and December 1998, and January 1999.

Depth to groundwater was determined using a water level indicator. The measured groundwater elevations for each well are summarized in Table 3.4.

3.5 MONITORING WELL PURGING AND SAMPLING

Monitoring wells were purged prior to groundwater quality sampling on November 24, 1998, to ensure that stagnant water was removed from the temporary monitoring wells and that water samples collected were representative of aquifer conditions. A submersible pump and new polyethylene tubing were used to purge each monitoring well. A minimum of three well volumes was purged from each monitoring well. Purged groundwater was monitored for pH, temperature, turbidity, dissolved oxygen, conductivity, and salinity to ensure stabilization prior to sample collection. Purge water parameters were measured with a Horiba™ water quality analyzer and are presented in Table 3.5.

Groundwater samples were collected from each monitoring well immediately after monitoring well purging was completed, utilizing the submersible pump and dedicated sample tubing. A portion of each sample was field filtered through a 0.45 µm filter prior preservation for dissolved sodium and an unfiltered aliquote was collected for total chloride.

Groundwater samples were submitted to GEL for analysis and are summarized in Table 3.6. Groundwater samples were transferred into appropriately preserved sample bottles supplied by GEL. Samples were immediately placed into an ice-packed cooler to maintain sample temperature at approximately 4°C. Samples were recorded on a chain-of-custody record and shipped to GEL. (See Appendix A).

3.6 DECONTAMINATION PROCEDURES

Decontamination of sampling equipment was completed following CRA standard operating procedures for decontamination. These procedures were followed throughout field activities to reduce the risk of sample cross-contamination and to maintain sample integrity. Prior to water level measurement, and between monitoring wells, the water level indicator was washed with a distilled water and Alconox solution, and then rinsed with distilled water. The Horiba™ Water Quality Meter was rinsed with distilled water between readings.

Clean nitrile gloves were worn in the field at all times during the groundwater level measurement, purging, and sampling activities. A new pair of nitrile gloves was used at each monitoring well to minimize the possibility of cross-contamination.

3.7 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) SAMPLING

To ensure quality assurance/quality control, CRA submitted one equipment rinsate (field) blank, a field duplicate sample (approximately 10 percent of the total samples) and designated one sample providing additional volume for the laboratory analyses of a matrix spike/matrix duplicate or matrix spike duplicate (MS/Dup or MS/MSD). The field blank and duplicate samples were submitted blind to GEL for analysis.

4.0 GROUNDWATER MONITORING RESULTS

4.1 GROUNDWATER ELEVATIONS

CRA measured static groundwater levels in November and December 1998, and January 1999. The depth to groundwater and groundwater elevations are presented in Table 3.4. The observed data for these events were used to evaluate groundwater flow directions in the southwest corner of the Site. The groundwater flow directions based on the three temporary monitoring wells for December 8, 1998 are presented on Figure 4.1.

4.2 FIELD MONITORING

Groundwater field measurements obtained during the November 1998 sampling event included pH, temperature, turbidity, dissolved oxygen, conductivity, and salinity. The groundwater quality field measurements for each monitoring well are summarized in Table 3.5.

4.3 LABORATORY ANALYTICAL RESULTS

Five groundwater samples were collected on November 24, 1998 and submitted to GEL for dissolved sodium and total chloride analysis. In addition to the groundwater monitoring samples, ten water samples were collected and analyzed for dissolved sodium and total chloride as part of the VAS. The VAS data is presented in Section 3.2.3 (see Table 3.3). No significant chemical gradient was identified through the VAS sampling.

A summary of groundwater sampling analytical data is presented in Table 4.1. Chain-of-custody records are presented in Appendix A. Laboratory analytical reports are presented in Appendix B.

All of the analytical data were reviewed for accuracy and conformance with the analytical methods and generally accepted laboratory procedures. Analytical data was assessed to determine whether any qualification was necessary, based on holding-time periods, method blanks, laboratory check samples, matrix spikes, laboratory duplicates, field blanks and field duplicates. Only minor qualifications were required, as documented in Data Quality Assessment and Validation Memorandum which is presented in Appendix D. All of the data was determined to be of acceptable quality for quantitative evaluation.

5.0 SURFACE WATER EVALUATION MAPPING

Surface water evaluation mapping was completed to support the interpretation of groundwater flow directions in the southwest portion of the Site. This activity included the installation and surveying of surface water staff gauges and collection of surface water elevation measurements.

5.1 INSTALLATION OF STAFF GAUGES

Surface water staff gauges were installed December 8, 1998 at the six locations presented on Figure 3.1. These locations were selected to provide surface water elevations for the southwest corner of the Site.

5.2 SURVEYING OF MONITORING WELLS AND STAFF GAUGES

Surveying of surface water staff gauges and temporary monitoring well locations was completed by CRA on December 14-16, 1998. The survey was completed utilizing Global Positioning System (GPS) and Total Station surveying techniques. Horizontal control was established relative to a local Site grid and vertical control is relative to GM on-Site datum. Vertical control for the staff gauge and temporary monitoring well elevations was surveyed to USGS mean datum, which was previously established at the facility.

The reference point elevation for the three (3) temporary monitoring wells and six (6) surface water staff gauges are presented in Table 3.4.

5.3 STATIC WATER LEVEL MEASUREMENTS

CRA measured static surface water and groundwater static water levels on various dates in November and December 1998, and in January 1999, at the six (6) surface water staff gauges and three (3) temporary monitoring wells installed in the area. The surface water and groundwater elevations are summarized in Table 3.4. Surface water and groundwater elevations for December 8, 1998 are presented on Figure 4.1. Based on the groundwater monitoring wells installed in this portion of the Site, groundwater flow was determined to be to the south-southeast.

6.0 SUMMARY

The following presents a summary of the groundwater quality assessment presented in this Report:

1) Sodium and chloride were reportedly detected in groundwater on the property southwest of the Site, as described in a report prepared for the property owner (Water Supply Evaluation, Insight, July, 1997). The Insight Report assumed, based solely on topography and surface water elevations, that groundwater flows from the Site in a southwesterly direction.

2) Three temporary groundwater monitoring wells and six surface water staff gauges were installed in late November/early December 1998 to assess groundwater flow directions and quality in the southwest portion of the Site.

3) VAS sampling at MW2A-98 identified dissolved sodium and total chloride levels to generally decrease with depth from concentrations of 610 mg/L and 340 mg/L, respectively, at the water table.

4) Based on the groundwater monitoring wells installed in this portion of the Site, groundwater flow was determined to be to the south-southeast.

5) Dissolved sodium and total chloride concentrations are summarized for the temporary monitoring wells as follows:

Monitoring Wells	*Dissolved Sodium (mg/L)*	*Total Chloride (mg/L)*
MW1A-98	155	363
MW2A-98	219	440
MW2A-98 (Dup.)	214	407
MW3A-98	70.8	260

6) Groundwater quality in the downgradient monitoring well, MW3A-98, did not exceed the Act 451, Part 201 Generic Residential Groundwater Criteria of 160 mg/L (or the Generic Industrial Groundwater Criteria of 450 mg/L) for sodium, and marginally exceeded the 250 mg/L aesthetic criteria for total chloride. MW3A-98 is approximately 400 feet north (i.e., upgradient) of the Site boundary.

7) The concentrations of dissolved sodium and total chloride identified in the temporary monitoring wells completed in the southwest portion of the Site are lower than those reported in the shallow aquifer just southwest of the Site.

Exhibit F

STATE OF MICHIGAN
IN THE CIRCUIT COURT FOR INGHAM COUNTY

COPY

GENERAL MOTORS CORPORATION, a Delaware Corporation,

Plaintiff,

v.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, a governmental department of the State of Michigan,

Defendant.

Case No. 00-92551 -AA

Hon. _____

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COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF OR, IN THE ALTERNATIVE, FOR AN APPEAL OF STATE AGENCY ACTION UNDER MICHIGAN CONST. ART 6, §28, MCL § 600.631, AND MCR 7.104

Plaintiff General Motors Corporation ("GM"), a Delaware corporation, by its attorneys, Honigman Miller Schwartz and Cohn, for its Complaint states as follows:

JURISDICTION AND VENUE

1. GM seeks declaratory and injunctive relief pursuant to MCR 2.605 to resolve an actual controversy between the parties as described below. The amount in controversy, exclusive of interest and costs, exceeds $25,000. This Court has jurisdiction over the claims herein pursuant to MCL §§ 600.601 and 600.605 and MCR 2.605 or, in the alternative,

$100.
Rec #279

pursuant to MCL § 600.631 and MCR 7.104. Venue is proper pursuant to MCL § 600.1615 in that the Defendant Michigan Department of Environmental Quality ("MDEQ") exercises governmental authority in Ingham County, Michigan.

GENERAL ALLEGATIONS

2. MDEQ is a governmental entity and department of the State of Michigan. MDEQ administers and enforces Part 201 (Environmental Response) of the Michigan Natural Resources and Environmental Protection Act ("NREPA"), MCL § 324.20101 *et seq.*, and the regulations promulgated thereunder.

3. GM owns the over 4,000-acre Milford Proving Ground ("MPG") located in the Township of Milford, Counties of Oakland and Livingston, Michigan. Among other things, GM conducts year-round, 24-hours per day road testing of automobiles and other vehicles at the MPG under all weather conditions.

4. GM uses salt (also known by its chemical name, sodium chloride) at the MPG for a number of purposes. During the winter, road salt must be applied for deicing purposes to an estimated 102.4 equivalent miles of roads, test tracks, and parking areas located within the MPG requiring deicing for driver safety. Salt is also used by GM in the winter for deicing purposes at the MPG on sidewalks, doorways, steps, ramps, etc. Salt is used year-round to regenerate water softeners and water softener regenerant resulting therefrom is discharged pursuant to a National Pollutant Discharge Elimination System ("NPDES") permit issued by MDEQ. Corrosion testing of vehicles is performed using, for example, naturally present salty water pumped from a brine well at the MPG. Until approximately August 1996, GM also used calcium chloride for dust suppression on dirt roads located within the MPG.

5. Both Oakland and Livingston Counties apply road salt to the road systems surrounding the MPG for driver safety in the winter.

6. When sodium chloride (salt) dissolves in water, such as when it is used to melt snow and ice (i.e., "deicing"), it dissociates into sodium ions ("ionic sodium") and chloride ions ("chloride").

7. In cooperation with MDEQ, GM has been voluntarily investigating groundwater sodium and chloride conditions at the MPG for several years and has submitted multiple reports to MDEQ on the results of GM's investigations.

8. On September 27, 2000, GM received a letter dated September 22, 2000, from MDEQ (a copy of which is attached as Exhibit A), in which MDEQ asserts that the MPG and adjacent properties are a "facility" under Part 201 due to the presence of sodium and chloride in groundwater and that GM is responsible for an activity causing a release or threat of release of a "hazardous substance" that MDEQ identifies as **sodium chloride (i.e., salt)** and GM is, therefore, liable under Section 20126 of Part 201.

9. More specifically, in the September 22, 2000, letter, MDEQ asserts:

> Staff of the [MDEQ] has obtained information that indicates that ***sodium chloride***, a hazardous substance, was released, deposited, or became located at the Proving Grounds. The concentrations of sodium and chloride released to the groundwater exceed the residential cleanup requirements of Section 20120a(1)(a) or (17) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA), for these chemicals. Any area, place, or property where hazardous substances exceed this threshold constitutes a "facility" which is regulated under Part 201 of the NREPA.

(Emphasis added).

10. Part 201 defines a "facility" as follows:

> "***Facility***" means any area, place, or property where a ***hazardous substance*** in excess of the concentrations which satisfy the requirements of ***section 20120a(1)(a) or (17)*** or the cleanup criteria for unrestricted residential use under part 213 has been ***released***,[1] deposited, disposed of, or otherwise comes to be located. . . .

MCL § 324.20101(1)(o) (emphasis added).

11. The term "hazardous substance" used in the definition of "facility" is a term of art, statutorily defined as follows and must be based upon one of four statutory criteria, to the exclusion of all other criteria:

> "Hazardous substance" means 1 or more of the following . . . :
>
> (i) Any substance that the department demonstrates, on a case by case basis, poses an unacceptable risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources.
>
> (ii) Hazardous substance as defined in the comprehensive environmental response, compensation, and liability act of 1980, Public Law 96-510, 94 Stat. 2767 ["CERCLA"].
>
> (iii) Hazardous waste as defined in part 111.
>
> (iv) Petroleum as described in part 213.

MCL § 324.20101(1)(t).

12. Sodium chloride (salt) and ionic sodium and chloride (dissolved salt) are neither "[h]azardous waste as defined in part 111" nor "[p]etroleum as described in part 213." MCL § 324.20101(1)(t)(iii), (iv). Therefore, in order to be a "hazardous substance," sodium chloride (salt) and ionic sodium and chloride (dissolved salt) must either be CERCLA "hazardous substances" or demonstrated on a case-by-case basis to "[pose] an unacceptable

---

[1] "'Release' includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a hazardous substance into the environment, or the abandonment or discarding of barrels, containers, and other closed receptacles containing a hazardous substance. . . ." MCL § 324.20101(1)(bb).

risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources." MCL § 324.20101(1)(t)(i), (ii).

13. Section 20120a(1)(a) of Part 201, cross referenced in the definition of "facility," above, directs MDEQ to establish hazardous substance cleanup criteria for the "residential" land use category, while § 324.20120a(17) provides that a remedial action plan relying on one of the categorical cleanup criteria, such as residential land use, "shall also consider other factors necessary to protect the public health, safety, and welfare, and the environment . . . if [MDEQ] determines based on data and existing information that such considerations are relevant to a specific facility." MCL § 324.20120a(17).

14. Consequently, a "facility" under Part 201 is any property where a: (i) "hazardous substance"; (ii) has been "released" into the environment; (iii) at levels exceeding a "residential" cleanup criterion for that "hazardous substance." Because a "hazardous substance" must have been "released" into the environment in order for a property to be a "facility," a property cannot be a "facility" on the basis of hazardous substances naturally present in the environment at background levels exceeding the "residential" cleanup criteria.

15. The Environmental Response Division ("ERD") of MDEQ has published the residential (and other) cleanup criteria for substances that MDEQ has deemed to be "hazardous substances" under Part 201 in Attachment A to a document entitled "Operational Memorandum No. 18" ("Op. Memo 18"), the most current version of which is dated June 7, 2000. In Op. Memo 18, MDEQ set the residential groundwater cleanup criteria for sodium and chloride at 120 milligrams/liter ("mg/l") and 250 mg/l, respectively. MDEQ has never

promulgated Op. Memo 18 as either a regulation or a guideline under the Administrative Procedures Act ("APA"), MCL § 24.201 *et seq*.

16. MDEQ has unlawfully declared the MPG and adjacent properties to be a "facility" because allegedly "hazardous substances" (salt and its dissolution products) are allegedly present above the residential cleanup criteria.

17. MDEQ's determination that GM is liable under Part 201 for the release of a hazardous substance, salt, to the environment at the MPG causing the MPG to be a "facility" under Part 201 exposes GM to liability for over Fifty Million Dollars to investigate the releases alleged by MDEQ and perform remedial action for such alleged releases, and exposes GM to penalties under Section 201137(1)(e) of Part 201 of up to $1,000 per day for failure to implement the "requests" by MDEQ in the September 22, 2000, letter, which, among other things, require GM to cease the use of road salt for deicing, necessitating periodic cessation of winter vehicle testing at the MPG, and to cease corrosion testing of vehicles.

18. Independent of any "requests" MDEQ is authorized to make of a "facility" owner under Part 201, Part 201 imposes certain mandatory requirements upon the owner of property that the owner knows is a "facility." For example, even non-liable "facility" owners are required to comply with Part 201's "due care" obligations, which include, but are not limited to: (i) undertaking measures to prevent exacerbation of existing contamination; (ii) exercising due care to prevent unacceptable exposures to hazardous substances; and (iii) taking reasonable precautions against the reasonably foreseeable acts of third parties. MCL § 324.20107a(1)(a) – (c). In addition, Part 201 requires a person liable under Part 201 to "[d]etermine the nature and extent of a release at the facility" and to "[d]iligently pursue

response activities necessary to achieve the cleanup criteria specified in this part and the rules promulgated under this part." MCL § 324.20114(1)(a), (g).

19. For the reasons set forth herein, an existing controversy and dispute between GM and MDEQ requires judicial resolution – i.e., the Court must determine the validity of MDEQ's determination that the MPG is a "facility" in order to define GM's rights and obligations under Part 201 and with respect to its continuing operations utilizing salt at the MPG.

COUNT I
DECLARATORY AND INJUNCTIVE RELIEF
MDEQ HAS UNLAWFULLY DETERMINED
SALT TO BE A HAZARDOUS SUBSTANCE

20. The allegations of paragraphs 1 through 19 are incorporated herein by reference.

21. As quoted above, in the September 22, 2000, letter MDEQ declares that a "hazardous substance," sodium chloride (salt) has been "released" at the MPG, causing the MPG to be a "facility" regulated under Part 201.

22. Op. Memo 18 does not list sodium chloride (salt) as a hazardous substance.

23. Sodium chloride is neither: (i) a CERCLA hazardous substance; (ii) a Part 111 hazardous waste; nor (iii) petroleum under Part 213.

24. Therefore, MDEQ has unlawfully determined that the MPG is a "facility" on the basis of the alleged presence of a substance that is not a "hazardous substance" under Part 201.

WHEREFORE, GM respectfully requests that the Court declare that:

a. MDEQ has unlawfully declared sodium chloride (salt) to be a "hazardous substance" under Part 201;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based upon the presence of sodium chloride (salt);

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of sodium chloride (salt) at the MPG.

COUNT II
DECLARATORY AND INJUNCTIVE RELIEF
MDEQ HAS UNLAWFULLY LISTED SODIUM AS A HAZARDOUS SUBSTANCE

25. The allegations of paragraphs 1 through 24 are incorporated herein by reference.

26. Ionic sodium (dissolved salt) is not a "hazardous substance" because it is neither a Part 111 hazardous waste nor petroleum under Part 213.

27. The definition of "hazardous substance" under Part 201, quoted above in paragraph 11, provides that CERCLA-listed hazardous substances are hazardous substances under Part 201; however, only elemental/metallic sodium is listed as a hazardous substance under CERCLA, not sodium chloride (salt) or ionic sodium (dissolved salt).

28. Through a request under the Freedom of Information Act ("FOIA"), MCL § 15.231 *et seq.*, GM obtained from MDEQ a document entitled "Part 201 Chemical Criteria Worksheet" prepared by the MDEQ, ERD, regarding sodium (the "Sodium Worksheet"), attached hereto as Exhibit B. The Sodium Worksheet indicates that the basis for "Sec 20101(1)(t) Hazardous Substance Determination" is "CERCLA Table 302.4." **That is, MDEQ has listed sodium as a hazardous substance in Op. Memo 18 because MDEQ erroneously believes that ionic sodium was listed as a hazardous substance under CERCLA by the United States Environmental Protection Agency ("EPA").**

29. EPA, in fact, listed in 40 CFR Table 302.4 only elemental/metallic sodium as a hazardous substance. *See* Exhibit C. Elemental/metallic sodium is indeed hazardous and is a non-naturally occurring, highly reactive --- explosive --- substance which will react violently with water and will ignite if merely exposed to moist air. **EPA did NOT list sodium chloride (salt) or ionic sodium (dissolved salt) as a CERCLA hazardous substance.**

30. This is clear because the CERCLA sodium hazardous substance listing shows Chemical Abstract Service Registry Number ("CASRN") 7440-23-5, which is the CASRN for elemental/metallic sodium, not sodium chloride (salt). 40 CFR Table 302.4 (*see also* Exhibit D). Sodium chloride (salt) has been assigned CASRN 7647-14-5. *See* Exhibit E. No CASRN has been assigned to ionic sodium, i.e., dissolved salt. Therefore, EPA clearly has not listed sodium chloride (salt) or ionic sodium (dissolved salt) as a hazardous substance under CERCLA. Notably, MDEQ listed the CASRN for elemental/metallic sodium on the Sodium Worksheet, not the CASRN for sodium chloride (salt).

31. Therefore, MDEQ has improperly listed sodium (dissolved salt) as a hazardous substance and improperly set a groundwater residential cleanup criterion for ionic sodium caused by the dissolution of sodium chloride (salt) in groundwater on the basis of EPA's listing of elemental/metallic sodium as a CERCLA hazardous substance. That is, as a matter of law and basic science, it would be clear error and arbitrary and capricious for MDEQ to rely upon the listing of elemental/metallic sodium in 40 CFR Table 302.4 as a basis for listing ionic sodium in groundwater resulting from the dissolution of sodium chloride (salt).

32. Consequently, the listing of sodium by MDEQ as a hazardous substance and the residential groundwater sodium cleanup criterion in Op. Memo 18 are unlawful and may not serve as a basis to characterize the MPG as a "facility" under Part 201.

WHEREFORE, GM respectfully requests that the Court declare that:

a. MDEQ has unlawfully listed ionic sodium (dissolved salt) as a hazardous substance under Part 201 and any cleanup criteria established by MDEQ under Part 201 for sodium are, therefore, unlawful and unenforceable;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based upon the presence of ionic sodium (dissolved salt) in the groundwater under and adjacent to the MPG;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT III
DECLARATORY AND INJUNCTIVE RELIEF
MDEQ HAS UNLAWFULLY ESTABLISHED THE
CLEANUP CRITERION FOR SODIUM

33. The allegations of paragraphs 1 through 32 are incorporated herein by reference.

34. In the June 2000 version of Op. Memo 18, MDEQ changed the sodium residential groundwater cleanup criterion from 160 mg/l in the May 1999 version of Op. Memo 18 to 120 mg/l. MDEQ did not follow APA rule or guideline promulgation procedures in doing so.

35. In response to a FOIA request for documents supporting MDEQ's revision of the sodium residential groundwater cleanup criterion, MDEQ simply supplied a printout of an American Heart Association ("AHA") World Wide Web page (http://www.americanherat.org - /Heart_and_Stroke_A_Z_Guide/sodium.html, printed June 12, 1999) listing AHA's recommended daily sodium (salt) intake of no more than 2,400 mg/day, and a Part 201 Chemical Criteria Worksheet for sodium. As stated above, the Sodium Worksheet lists the CASRN for elemental/metallic sodium. The Sodium Worksheet merely recites the AHA's

recommended daily sodium (salt) intake, but does not explain how MDEQ derived the Part 201 residential groundwater cleanup criterion for sodium from that number.

36. In fact, the new Part 201 residential groundwater cleanup criterion for sodium is lower than the concentration of sodium that is allowed to be discharged directly to the groundwater under the rules recently promulgated by MDEQ under Part 31 (Water Resources Protection) of NREPA, MCL § 324.3101 *et seq.*, which became effective on August 26, 1999, and provide that a discharge to groundwater containing sodium shall be at a concentration of less than 150 mg/l. Michigan Administrative Code ("MAC") R 323.2222(3)(c). It is arbitrary and capricious to set a groundwater cleanup criterion at a level that is lower than the level allowed by MDEQ to be discharged to the groundwater.

37. MDEQ's identified bases for the Part 201 residential groundwater cleanup criterion for sodium are vague and without adequate foundation in law or fact, and MDEQ has acted arbitrarily and capriciously in setting the Part 201 residential groundwater cleanup criterion for sodium.

WHEREFORE, GM respectfully requests that the Court declare that:

a. The Part 201 residential groundwater cleanup criterion set by MDEQ for sodium is unlawful;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based on the presence of ionic sodium (dissolved salt) in the groundwater under and adjacent to the MPG;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT IV
DECLARATORY AND INJUNCTIVE RELIEF
MDEQ HAS UNLAWFULLY LISTED
CHLORIDE AS A HAZARDOUS SUBSTANCE

38. The allegations of paragraphs 1 through 37 are incorporated herein by reference.

39. Chloride (dissolved salt) is neither listed as a hazardous substance under CERCLA, as a Part 111 hazardous waste, nor is it petroleum under Part 213 of NREPA and, therefore, does not fall within the statutory "hazardous substances" incorporated by reference under Part 201. Therefore, Section 20101(t)(i) of Part 201 remains as the only possible basis for listing chloride (dissolved salt) as a "hazardous substance" under Part 201.

40. Through a request under FOIA, GM obtained from MDEQ a document entitled "Part 201 Chemical Criteria Worksheet" prepared by the MDEQ, ERD, regarding chloride (the "Chloride Worksheet"), attached hereto as Exhibit F. The Chloride Worksheet states in the "Notes" section: "Basis: Agricultural impacts (Dow Chem. & MDNR, 87, 88)" and in the "Sec. 20101(1)(t)" portion of the document states "MDEQ-State DWS."

41. The reference to "agricultural impacts" as the basis for listing chloride indicates that MDEQ believes that chloride falls within the Part 201 "hazardous substance" definition under MCL § 324.20101(1)(t)(i), cited above: "[a]ny substance that the department demonstrates, on a case by case basis, poses an unacceptable risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources."

42. The documents in the FOIA response, including a number of scientific journal articles, indicate that the "agricultural impacts" relied upon by MDEQ solely relate to the

effects of chloride soil contamination in the root zone of plants, not contamination of groundwater in a subterranean aquifer.

43. The reference to "MDEQ-State DWS" on the Chloride Worksheet indicates that MDEQ believes that chloride in groundwater also falls within the Part 201 definition of "hazardous substance" because a "State Drinking Water Standard" allegedly exists for chloride.

44. This is clear legal error because:

a. The existence of a state drinking water standard is not listed in MCL § 324.20101(1)(t) as a basis for including a substance within the Part 201 definition of "hazardous substance."

b. Even if the existence of a state drinking water standard was a basis for concluding that a substance fell within the definition of "hazardous substance" under MCL § 324.20101(1)(t)(i), there is no Michigan drinking water standard for chloride.

c. EPA has established a Secondary Maximum Contaminant Level ("SMCL") for chloride under the federal Safe Drinking Water Act, 42 USC § 300f *et seq.*; however, SMCLs "control contaminants in drinking water that primarily affect the aesthetic qualities relating to the public acceptance of drinking water. . . . The regulations are not Federally enforceable but are intended as guidelines for the States." 40 CFR § 143.1. **Michigan has never adopted any of the SMCLs.** Aesthetic considerations are not among those listed in MCL § 324.20101(1)(t)(i) for demonstration of a substance as hazardous. Consequently, MDEQ may not list a substance as "hazardous" merely because it might impact the taste of drinking water – unless MDEQ "demonstrates on a case by case basis [the substance], poses an

unacceptable risk to the public health, safety, or welfare, or the environment, considering the fate of the material, dose-response, toxicity, or adverse impact on natural resources." MCL § 324.20101(1)(t)(i).

45. Therefore, MDEQ has improperly listed chloride (dissolved salt) as a hazardous substance and improperly set a groundwater residential cleanup criterion for chloride caused by the dissolution of sodium chloride (salt) in groundwater.

46. Consequently, the listing of chloride (dissolved salt) by MDEQ as a hazardous substance and the residential groundwater chloride cleanup criterion in Op. Memo 18 are unlawful and may not serve as a basis to characterize the MPG as a "facility" under Part 201.

WHEREFORE, GM respectfully requests that the Court declare that:

a. MDEQ has unlawfully listed chloride (dissolved salt) as a hazardous substance under Part 201 and any cleanup criteria established by MDEQ under Part 201 for chloride are, therefore, unlawful and unenforceable;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based upon the presence of chloride (dissolved salt) in the groundwater under and adjacent to the MPG;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of chloride (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT V
DECLARATORY AND INJUNCTIVE RELIEF
MDEQ HAS UNLAWFULLY ESTABLISHED THE CLEANUP CRITERION FOR CHLORIDE

47. The allegations of paragraphs 1 through 46 are incorporated herein by reference.

48. The residential groundwater cleanup criterion for chloride listed in Op. Memo 18 is identical to the SMCL for chloride promulgated by EPA at 40 CFR § 143.3.

49. As detailed in paragraph 44, above, SMCLs are not federally enforceable and Michigan has never adopted SMCLs, including the SMCL for chloride.

50. Section 20120a(5) of Part 201 provides the following regarding determination of the cleanup criteria for non-toxic hazardous substances in an aquifer:

> If a cleanup criterion derived under subsection (4) for groundwater in an aquifer differs from either: (a) the ***state drinking water standard*** established pursuant to section 5 of the safe drinking water act, Act No. 399 of the Public Acts of 1976, being section 325.1005 of the Michigan Compiled Laws, or (b) criteria for ***adverse aesthetic characteristics*** derived pursuant to R 299.5709 of the Michigan administrative code, the cleanup criterion shall be the more stringent of (a) or (b) unless the department determines that compliance with this rule is not necessary because the use of the aquifer is reliably restricted pursuant to section 20120b(4) or (5).

MCL § 324.20120a(5) (emphasis added).

51. MAC R 299.5709, referenced in the above statutory provision, improperly incorporates by reference EPA methods for determining "adverse aesthetic characteristics" and provides, in part:

> For a hazardous substance which, singly or in combination with other hazardous substances present at the site, imparts ***adverse aesthetic characteristics*** to groundwater, the concentration which is documented as the taste or odor threshold or the concentration below which appearance or other aesthetic characteristics are not adversely affected. The criteria of this subdivision shall apply only when the level required by this subdivision is less than the level required by subdivision (a) or (b) of this subrule. ***A taste or odor threshold concentration or a concentration adversely affecting appearance shall be determined according to methods approved by the United States environmental protection agency.***[2]

MAC R 299.5709(2)(d) (emphasis added).

[2] Subdivisions (a) and (b) referenced in this rule provide for the calculation of cleanup criteria for hazardous substances that are carcinogens (subdivision (a)) or that are not a carcinogen, genotoxic teratogen, or germ line mutagen (subdivision (b)). MAC R 299.5709(2)(a), (b). Subdivision (c) provides that the cleanup criterion for a hazardous substance with an SMCL be set at the SMCL. MAC R 299.5709(2)(c).

52. The use of the phrase "adverse aesthetic characteristics" by the Legislature in MCL § 324.20120a(5)(b) ("criteria for ***adverse aesthetic characteristics*** derived pursuant to R299.5709") employs exactly the same phrase as MAC R 299.5709(2)(d).

53. MDEQ has interpreted the phrase to refer to the direction in MAC R 299.5709(2)(c) to set the cleanup criterion for a "hazardous substance" at its SMCL, if one exists. That is not what the statute directs, however. The statute clearly refers to only the improperly incorporated by reference EPA methods recited in MAC R 299.5709(2)(d) for determining an applicable aesthetics-based cleanup criterion.

54. The APA sets forth the following explicit procedures that a state agency must follow in order to incorporate by reference methods adopted by another agency, such as the EPA, in a rule:

> An agency may adopt, by reference in its rules and without publishing the adopted matter in full, all or any part of a code, standard or regulation which has been adopted by an agency of the United States or by a nationally recognized organization or association. ***The reference shall fully identify the adopted matter by date and otherwise.*** The reference shall not cover any later amendments and editions of the adopted matter, but if the agency wishes to incorporate them in its rule it shall amend the rule or promulgate a new rule therefor. . . .

MCL § 24.232(4) (emphasis added).

55. MAC R 299.5709(2)(d) directs MDEQ to employ "methods approved by the United States environmental protection agency" in order to set a groundwater cleanup criterion addressing "adverse aesthetic characteristics." Nowhere in Part 201 or its rules is any EPA method for addressing "adverse aesthetic characteristics" fully identified by date or otherwise for incorporation by reference.

56. The generic reference in MAC R 299.5709(2)(d) to "methods approved by the United States environmental protection agency" clearly does not comply with the explicit,

mandatory requirement under the APA that an incorporation by reference "shall fully identify the adopted matter by date and otherwise." MCL § 24.232(4).

57. Therefore, the incorporation by reference in MCL § 324.20120a(5)(b) and MAC R 299.5709(2)(d) is invalid and any cleanup criterion established by MDEQ pursuant to those provisions is accordingly unlawful and unenforceable.

58. Therefore, MDEQ has unlawfully established a chloride (dissolved salt) cleanup criterion of 250 mg/l because the Part 201 rules have not properly incorporated by reference any "methods approved by the United States environmental protection agency" for the determination of a "taste or odor threshold concentration" nor were any such methods used or relied upon by MDEQ in setting the chloride (dissolved salt) cleanup criterion.

WHEREFORE, GM respectfully requests that the Court declare that:

a. MDEQ has unlawfully established the Part 201 cleanup criterion for chloride (dissolved salt) in groundwater;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based upon the presence of chloride (dissolved salt) in the groundwater under and adjacent to the MPG in excess of the Part 201 cleanup criterion;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of chloride (dissolved salt) in the groundwater under and adjacent to the MPG in excess of the unlawfully established Part 201 cleanup criterion for chloride.

COUNT VI
DECLARATORY AND INJUNCTIVE RELIEF
THE PART 201 CLEANUP CRITERIA ARE NOT ENFORCEABLE AGAINST THIRD PARTIES BECAUSE MDEQ HAS FAILED TO FOLLOW APA PROCEDURES IN LISTING SODIUM AND CHLORIDE AS HAZARDOUS SUBSTANCES AND SETTING THE CLEANUP CRITERIA

59. The allegations of paragraphs 1 through 58 are incorporated herein by reference.

60. Part 201 directs MDEQ to establish "cleanup criteria" for specified categories of land use, including residential, commercial, recreational, industrial, and other categories established by MDEQ. MCL § 324.20120a(1)(a) – (e).

61. MDEQ is also directed under Part 201 to promulgate rules "to implement the powers and duties of the department under this part, and as otherwise necessary to carry out the requirements of this part." MCL § 324.20104(1).

62. MDEQ has promulgated a number of rules under Part 201, including rules which direct how to calculate certain cleanup criteria, but has never promulgated any rules which list "hazardous substances" in addition to those statutory "hazardous substances" incorporated by reference in MCL § 324.20101(1)(t)(ii) – (iv), nor have the cleanup criteria published in Op. Memo 18 ever been officially incorporated into the promulgated Part 201 rules.

63. The Legislature amended Part 201 in 1995 to specifically provide that the existing Part 201 rules for determining health-based groundwater cleanup levels (MAC RR 299.5723 and .5725) shall not apply for calculations of residential cleanup criteria, the exceeding of which determines Part 201 "facility" status. MCL § 324.20120a(8).

64. MDEQ has not yet promulgated replacement rules, and now calculates the health-based generic residential groundwater cleanup criteria using the algorithms set forth in

the August 31, 1998, MDEQ document entitled "Part 201 Generic Drinking Water Criteria Technical Support Document," which has never been promulgated as a rule or a guideline under the APA. This document constitutes a rule requiring promulgation under the APA because it is "an agency regulation, statement, standard, policy, ruling, or instruction of general applicability that implements or applies law enforced or administered by the agency . . . ." MCL § 24.207.

65. The Drinking Water and Radiological Protection Division of MDEQ, which is responsible for regulating drinking water, **has not adopted drinking water standards for sodium chloride, sodium, or chloride.** *See, e.g.*, MAC R 325.10604c.

66. Therefore, the MDEQ, ERD, has acted arbitrarily and capriciously by establishing drinking water-based groundwater cleanup criteria when its sister division actually responsible for the regulation of drinking water has specifically declined to regulate sodium chloride, sodium, and chloride in drinking water itself, much less in groundwater.

67. As discussed above, MDEQ published its Part 201 cleanup criteria in Op. Memo 18; however, MDEQ did not follow the procedures set forth in the APA for promulgating either rules or guidelines in doing so.

68. Under the APA, a "rule" is "an agency regulation, statement, standard, policy, ruling, or instruction ***of general applicability*** that ***implements or applies law enforced or administered by the agency***, or that prescribes the organization, procedure, or practice of the agency . . . ." MCL § 24.207 (emphasis added).

69. A rule must be promulgated according to the procedures set forth in Chapter 3 of the APA, MCL §§ 24.231 - .264, in order to be effective. For example: (i) the agency must give notice of, and hold, a public hearing (MCL § 24.241); and (ii) such notice must be

published in newspapers meeting the standards set forth in the APA and also in the Michigan Register (MCL § 24.242). A rule is invalid and not binding on those outside of the agency if the agency fails to comply with these requirements. MCL § 24.243(1). In contrast, a "guideline" is not binding on those outside of the agency even when properly promulgated under the APA. A "guideline" is "an agency statement or declaration of policy which the agency intends to follow, which ***does not have the force or effect of law, and which binds the agency but does not bind any other person***." MCL § 24.203(6) (emphasis added). Before adopting a guideline, an agency must provide notice of the proposed guideline and an opportunity to comment on it to, among others, the office of the Governor and each person who requested advance notice from the agency of such actions. MCL § 24.224. Notice of proposed and adopted agency guidelines must also be published in the Michigan Register. MCL § 24.208(1)(i).

70. The listing of hazardous substances and their cleanup criteria in Op. Memo 18 is clearly intended by MDEQ to be of general applicability and to implement Part 201 – a law enforced and implemented by MDEQ. **MDEQ, however, has not followed any of the APA rule or guideline promulgation procedures in setting the cleanup criteria in Op. Memo 18.** None of the exceptions to the definition of "rule" under the APA applies here so as to excuse MDEQ from complying with its obligations under the APA. MCL § 24.207(a) – (p).

71. Therefore, the Part 201 cleanup criteria are not enforceable against third parties as a formally promulgated rule. That is precisely what MDEQ did here when it improperly declared the MPG to be a "facility" based upon the residential groundwater cleanup criteria for ionic sodium and chloride (dissolved salt) in Op. Memo 18, which were adopted with complete disregard for the APA's requirements.

72. To the extent that MDEQ believes it has made a case-by-case demonstration that ionic sodium and chloride (dissolved salt) are "hazardous substances," MDEQ is required to follow the same APA rule promulgation procedures in order to make a case-by-case demonstration under MCL § 324.20101(1)(t)(i) that a substance not statutorily incorporated by reference in the definition of "hazardous substance," such as sodium chloride (salt), ionic sodium or chloride (dissolved salt), is nonetheless a "hazardous substance."

73. Therefore, MDEQ may not lawfully determine that the MPG is a "facility" under Part 201 on the basis of the presence of sodium chloride (salt) or ionic sodium and chloride (dissolved salt) in the groundwater beneath the MPG and adjacent properties because MDEQ has failed to promulgate rules both: (i) listing sodium chloride (salt) or ionic sodium and chloride (dissolved salt) as "hazardous substances" under MCL § 324.20101(1)(t)(i); and (ii) establishing the cleanup criteria for each substance.

WHEREFORE, GM respectfully requests that the Court declare that:

a. MDEQ has unlawfully listed ionic sodium and chloride (dissolved salt) as hazardous substances under Part 201 and any cleanup criteria established by MDEQ under Part 201 for ionic sodium and chloride are, therefore, unlawful and unenforceable;

b. MDEQ has unlawfully determined that the MPG and adjacent properties are a "facility" under Part 201 based upon the presence of ionic sodium and chloride (dissolved salt) in the groundwater under and adjacent to the MPG;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium and chloride (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT VII
DECLARATORY AND INJUNCTIVE RELIEF
THE PART 201 "PERMITTED RELEASE" EXEMPTION APPLIES TO WATER SOFTENER REGENERANT DISCHARGES, ROAD SALTING, AND DUST SUPPRESSING ACTIVITIES AT THE MPG

74. The allegations of paragraphs 1 through 73 are incorporated herein by reference.

75. Assuming, arguendo, that the MPG and adjacent properties could be characterized as a "facility" under Part 201, (i) the application of road salt to de-ice the roads, parking lots, and other areas at the MPG, (ii) the discharge of "water softener regenerant," which contains sodium and chloride, to a seepage lagoon at the MPG pursuant to NPDES Permit No. MI0001911 issued by MDEQ, and (iii) the use of chloride dust suppressants at the MPG all fall within the "permitted release" exemption under Section 20114(4) of Part 201 and, therefore, any alleged contamination resulting from these activities is not subject to the remedial and other obligations imposed under Part 201.

76. In addition to the "requests" in MDEQ's September 22, 2000, letter, Section 324.20114 of Part 201 independently requires a person liable under Part 201 to "[d]etermine the nature and extent of a release at the facility" and to "[d]iligently pursue response activities necessary to achieve the cleanup criteria specified in this part and the rules promulgated under this part." MCL § 324.20114(1)(a), (g). These mandatory requirements, however, "***do not apply to a permitted release*** or a release in compliance with applicable federal, state, and local air pollution control laws." MCL § 324.20114(4) (emphasis added).

77. Therefore, the remediation requirements of MCL § 324.20114(1) are not applicable to a site (or a portion thereof) that has become a "facility" due to a "permitted release."

78. Further, Section 20126a(5) of Part 201 provides: "A person shall not be required under this part to undertake response activity for a permitted release."

79. A "permitted release" is defined under Part 201 as one or more of the following:

> (i) ***A release in compliance with an applicable, legally enforceable permit issued under state law.***
>
> (ii) ***A lawful and authorized discharge into a permitted waste treatment facility.***
>
> (iii) A federally permitted release as defined in the comprehensive environmental response, compensation, and liability act of 1980, Public Law 96-510, 94 Stat. 2767.

MCL § 324.20101(1)(aa) (emphasis added).

80. Since July 22, 1981, NPDES Permit No. MI0001911 has authorized GM to discharge a maximum of 10,000 gallons per day of, among other things, "water softener regenerant," which contains ionic sodium and chloride (dissolved salt), through a seepage lagoon (a permitted waste treatment facility) designated as "Outfall 003" in the permit. *See* Exhibit G. This discharge was discontinued in 1997 when it was rerouted to the MPG wastewater treatment plant and the discharges prior to 1997 were always in compliance with the NPDES permit.

81. Therefore, any ionic sodium or chloride (dissolved salt) groundwater contamination resulting from the NPDES-permitted discharge falls within the Part 201 permitted release exemption and is not subject to the Part 201 investigation, remediation, and other requirements.

82. Part 22 of the rules promulgated under the former Water Resources Commission Act, now codified as Part 31 of NREPA, sets forth requirements for the issuance of permits for discharges to groundwater, among other things. Prior to August 26, 1999,

certain activities were specifically exempted from the requirement to obtain a permit – such activities were granted a "permit by rule" – including the "[c]*ontrolled application* of *de-icing chemicals* used with *normally accepted* or regulated *practices*." MAC R 323.2209(1)(c) (superseded as of August 26, 1999).

83. Former MAC R 323.2209(1)(b) also grants a permit by rule for the "*controlled application* of *dust-suppressant chemicals* used with *normally accepted* or regulated *practices*." (Emphasis added.)

84. The term "controlled application" was defined as "the proper application of a chemical for its intended purpose." MAC R 323.2202(f) (superseded August 26, 1999). The rules, however, do not elaborate further on the meaning of the phrase "normally accepted or regulated practices."

85. There were no other regulations regarding the application of road salt to private property for deicing purposes during the effective period of superseded MAC R 323.2202(f). Nor were there any other regulations regarding the application of dust suppressants on private property.

86. GM properly applied deicing road salt at the MPG for its intended purposes, that is, melting snow and ice on road and other surfaces, in a manner consistent with normally accepted practices.

87. Therefore, GM fell within the former Part 31 permit by rule for the application of deicing chemicals.

88. Calcium chloride was utilized at the MPG on unpaved roads for dust suppression until August 1996, when water from the MPG's potable water system was substituted.

89. GM properly applied calcium chloride to unpaved roads at the MPG for its intended purposes, that is, dust control, in a manner consistent with normally accepted practices.

90. Any chloride released though dust suppression activities, both before and after August 1996, therefore, also falls within the Part 201 permitted release exemption.

91. Therefore, GM is not liable under Part 201 to take any action with respect to the presence of sodium chloride (salt) and its dissolution products, ionic sodium and chloride (dissolved salt), in the groundwater under the MPG and adjacent properties due to (i) the application of road salt to de-ice the roads, parking lots, and other areas at the MPG, (ii) the discharge of "water softener regenerant" pursuant to NPDES Permit No. MI0001911, and (iii) the use of dust suppressants at the MPG.

WHEREFORE, GM respectfully requests that the Court declare that:

a. The Part 201 "permitted release" exemption applies to GM's discharge of water softener regenerant to the seepage lagoon pursuant to the NPDES permit;

b. The Part 201 "permitted release" exemption applies to GM's use of road salt for deicing the roads, parking lots, and other areas at the MPG;

c. The Part 201 "permitted release" exemption applies to GM's use of calcium chloride as a dust suppressant at the MPG;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium and chloride (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT VIII
THE MPG IS NOT A "FACILITY" BECAUSE THE SODIUM AND CHLORIDE IN THE GROUNDWATER REPRESENT BACKGROUND CONDITIONS

92. The allegations of paragraphs 1 through 91 are incorporated herein by reference.

93. If the ionic sodium and chloride (dissolved salt) found at the MPG and adjacent properties are naturally-occurring, the MPG would not be a "facility" even if the concentrations exceed the generic residential cleanup criteria because those concentrations represent "background" conditions. Section 20120a(11) of Part 201 provides:

> If the cleanup criterion for a hazardous substance determined by R 299.5707 of the Michigan administrative code is greater than a cleanup criterion developed for a category pursuant to subsection (1), the criterion determined pursuant to R 299.5707 of the Michigan administrative code shall be the cleanup criterion for that hazardous substance in that category.

MCL § 324.20120a(11).

94. MAC R 299.5707, cited in the above quote, provides for cleanup to "background" levels of a hazardous substance. Footnote B of Attachment A to Op. Memo 18 indicates that the "background" value, as defined in MAC R 299.5701(c), may be substituted for the calculated cleanup criteria for both ionic sodium and chloride (dissolved salt) if the "background" level exceeds the calculated cleanup criteria. MAC R 299.5701(c) defines "background" as "the concentration or level of a hazardous substance which ***exists in the environment at or regionally proximate to a site*** that is ***not attributable to any release*** at or regionally proximate to the site." (Emphasis added.)

95. MCL § 324.20120a(11) essentially provides that "background" concentrations at a site will override the residential cleanup criteria calculated under MCL § 324.20120a(1)(a) with respect to determining whether a property is a "facility" and whether remediation is necessary.

96. Chloride concentrations in excess of the Part 201 residential cleanup criterion have been documented by the United States Geological Service throughout Livingston and Oakland Counties. *See, e.g.*, Exhibit H.

97. The ionic sodium and chloride (dissolved salt) levels detected in the bedrock aquifer under the MPG and where groundwater from the bedrock aquifer migrates into the overburden aquifer also represent "background" and, therefore, cannot be a basis for a "facility" determination. The induction of brine from the bedrock aquifer into the overburden aquifer by the pumping of water production wells located in the overburden aquifer does not cause the MPG to fall within the meaning of "facility" because a hazardous substance has not "been released, deposited, disposed of, or otherwise [come] to be located" in the environment as required by Part 201's definition of "facility" in MCL § 324.20101(1)(o), and the ionic sodium and chloride (dissolved salt) levels represent concentrations which exist "in the environment at or regionally proximate to" the MPG as referenced in MAC R 299.5701(c)'s definition of "background." That is, the pumping does not cause a contaminant to be released to the environment and the levels observed are reflective of local background conditions.

98. Therefore, because the ionic sodium and chloride (dissolved salt) concentrations detected at the MPG represent "background" levels, the MPG is not a "facility" even if those levels are greater than the residential cleanup criteria, and GM would have no liability under Part 201 to perform remediation or engage in other activities.

WHEREFORE, GM respectfully requests that the Court declare that:

a. The ionic sodium (dissolved salt) concentrations in the groundwater under the MPG and adjacent properties represent "background" under Part 201;

b. The chloride (dissolved salt) concentrations in the groundwater under the MPG and adjacent properties represent "background" under Part 201;

and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium and chloride (dissolved salt) in the groundwater under and adjacent to the MPG.

COUNT IX
MICHIGAN CONSTITUTION OF 1963, ARTICLE 6, §28, RJA 631, AND MCR 7.104 REVIEW

99. The allegations of paragraphs 1 through 98 are incorporated herein by reference.

100. In the alternative, should this Court conclude that the September 22, 2000, letter is an order, decision, or opinion of a state board, commission, or agency reviewable under MCL § 600.631 and MCR 7.104, or a final decision, finding, ruling, or order of an administrative officer or agency reviewable under the Michigan Constitution of 1963, Article 6, §28, then this Court should review the determinations made in the September 22, 2000, letter and find that the determinations therein were not authorized by law, for, among other reasons, the following:

a. MDEQ based its determinations on an application of incorrect legal principles;

b. The determinations are not supported by competent, material, and substantial evidence on a properly constituted record;

c. The determinations are arbitrary, capricious, and an abuse of discretion or an unwarranted exercise of discretion;

d. The determinations are in excess of the statutory authority and jurisdiction of MDEQ; and

e. The determinations are in violation of the Michigan Constitution, the United States Constitution, and applicable statutory law.

WHEREFORE, the Court should vacate the determinations by MDEQ in the September 22, 2000, letter and grant such other relief as may be appropriate, including enjoining MDEQ from seeking to enforce inapplicable requirements on GM based upon the presence of ionic sodium and chloride (dissolved salt) in the groundwater under and adjacent to the MPG.

Respectfully submitted,

Attorneys for Plaintiff GENERAL MOTORS CORPORATION

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DATED: October 13, 2000

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Exhibit G

Date and Time 05/02/97 14:39:02

From: STANFIEC--DNRDC
To: VENSB --DNRDC

From: Cheryl Stanfield, ERD, Shiawassee District Office
Subject: Salt Water (again)

Had a call from Lois of DWRPD about a new subdivision that is going in just southwest of GM proving grounds "Oaks on Beach". Big houses, big $. Started drilling wells for homes and found high chlorides, up to 1000 ppm. Developer angry!!! GM may be responsible as they have salt storage on site and use salt in splash testing for cars etc. There is a meeting on Thursday at 1:30 at Livingston County Health Dept. with reps from GM. We are expected at the meeting. I'm going to meet Mark Doyle Monday at 10:00 to see logs, data, maps, etc. and also visit site before meeting? Are you available to go with me? We could see about doing it in the pm if you'd rather do it on your way home.

Phone (517) 625-4645

Exhibit H

STATE OF MICHIGAN

JOHN ENGLER, Governor
DEPARTMENT OF ENVIRONMENTAL QUALITY
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973
INTERNET: http://www.deq.state.mi.us
RUSSELL J. HARDING, Director

REPLY TO:
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION
3423 N MARTIN L KING JR BLVD
PO BOX 30630
LANSING, MI 48909-8130

June 17, 1997

Lukuma Residence
12277 Jacoby
Milford, Michigan 48380

Dear Property Owner:

On May 13, 1997, representatives of the Michigan Department of Environmental Quality (DEQ) and the Livingston County Health Department collected a sample from your drinking water well. The sample was collected as part of an investigation of the occurrence of elevated chloride and sodium concentrations in some area drinking water wells. The sample was forwarded to the DEQ, Drinking Water Analysis Laboratory. A copy of the laboratory report is enclosed for your review.

The results of the analysis reported satisfactory water quality with the exception of hardness, chloride, and sodium. Elevated hardness is not a health concern but will cause problems such as scaling of pipes and fixtures. The concentrations of chloride and sodium found in your water supply were greater than expected for this area. Chloride was detected at 447 milligrams per liter (mg/L) which exceeds the recommended limit of 250 mg/L. Sodium was detected at 186 mg/L. It is suggested that individuals who have been placed on a sodium-restricted diet consult their physician about the long-term consumption of this water.

If you have questions, feel free to contact Mr. Mark Doyle, Livingston County Health Department at 517-536-9850, or me.

Sincerely,

Lois Elliott Graham

Lois Elliott Graham, R.S.
Contamination Investigation Unit
Ground Water Supply Section
Drinking Water and Radiological Protection Division

LEG:ckh

Enclosures
cc: Mr. Daryl Fecho, Manager, Brighton Township
Mr. Mark Doyle, Livingston County Health Department
Ms. Beth Vens, DEQ, ERD, Shiawassee District Office
File: Kensingston Road Area Residential Wells