

GM Lansing Grand River
Work Practice Plan for the Minimization of Organic HAP Emissions

Pursuant to Paragraph 63.3094 of NESHAP Subpart IIII, General Motors' [Lansing Grand River \(LGR\)](#) facility has developed a work practice plan to minimize organic Hazardous Air Pollutant (HAP) emissions from the following activities:

1. The storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established under §63.3090(a) through (d) or §63.3091(a) through (d). These coating operations include ELPO, primer surfacer, topcoat, final repair, glass bonding adhesive operations, sealers and adhesives, and deadener.
2. The cleaning and the purging of equipment associated with all coating operations for which emission limits are established under §63.3090(a) through (d) or §63.3091(a) through (d).

The plan details are identified in the following paragraphs.

I. Identify HAP containing materials subject to the work plan requirements.

In order to identify the HAP containing coatings, thinners, and cleaning materials, [LGR](#) reviewed the formulation data contained on supplier Safety Data Sheets or requested HAP content from suppliers. Once the list of HAP containing materials is developed, [LGR](#) will review plant operations to identify where the materials are stored, mixed, conveyed, and / or used as equipment cleaning or purging solvents.

The materials, location, and uses are summarized in the MACT Work Practice Plan Appendix.

II. Implement work practices to minimize HAP emissions from the storage, mixing, and conveying of coatings, thinners, cleaning materials, and waste materials as identified in Paragraph I.

A. Storage Work Practice (63.3094(b) (1))

All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials will be received and stored in closed containers.

B. Spill Prevention Work Practice (63.3094(b) (2))

The risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials will be minimized.

The following practices will be utilized to minimize the risk of spills:

1. Materials will be stored indoors in designated areas to the extent practicable to minimize the risk of container puncture during storage or handling. Example areas are as follows:
 - a. Low traffic areas
 - b. Paint mix room
 - c. Walled areas
 - d. Flammable cabinets
 - e. Storage tanks
2. Materials will, to the extent practicable, be stored indoors in areas with containment, curbing, and / or sloped floors.
3. Storage tanks will be equipped with high level alarms to prevent overfilling.
4. Load / unload activities will be monitored by a GM representative and will be stopped immediately should material be leaked or spilled. The environmental response plan will be initiated to quickly clean up the leak or spill.
5. Material handling and transfer operations will be conducted according to specific work plans developed for the function or in accordance with good engineering practices.
6. Employees will be trained pursuant to the Resource Conservation and Recovery Act, as appropriate.

C. Material Conveyance (63.3094(b) (3))

Organic-HAP-containing coatings, thinners, and cleaning materials will be conveyed from one location to another in closed containers or pipes.

Materials are conveyed in pipes for the following activities:

1. Delivery of paint from the paint recirculation systems to the paint booths.
2. Delivery of purge solvent from the paint mix room to the paint booths.
3. Recovery of the purge solvent to the reclaimed purge solvent tank.

Materials that are not conveyed in pipes will be transferred in closed containers.

D. Mixing vessels (63.3094(b) (4))

Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials will be closed except when adding to, removing, or mixing the contents.

E. Cleaning of storage, mixing and conveying equipment (63.3094(b) (5))

The requirement for the plan to minimize organic HAP emissions during the cleaning of storage, mixing, and conveying equipment is satisfied by the implementation of some or all of the activities listed below. LGR will implement

one or more of these as appropriate, taking into consideration the particular operation and the particular activities involved.

Examples of practices which will be considered:

1. Use of cleanup materials that eliminate or minimize the amount of organic HAP in the material.
2. Use of closed loop, recirculating cleaning practices.
3. Minimizing to the extent possible the amount of organic HAP containing material.
4. Manage materials in closed containers.

III. Implement work practices to minimize organic HAP emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are established under §63.3090(a) through (d) or §63.3091(a) through (d).

A. Vehicle body wipe emissions (63.3094 (c)(1)(i))

LGR will use one or more of the following techniques for minimizing organic HAP emissions for vehicle body wipe processes.

1. Use of solvent-moistened wipes.
2. Keeping solvent containers closed when not in use.
3. Keeping wipe disposal/recovery containers closed when not in use.
4. Use of tack-wipes.
5. Use of solvents containing less than 1 percent organic HAP by weight.

The following table identifies the body wiping operations and the technique(s) in use.

Operation	Location	Technique
Sealer cleanup	Paint Shop Sealer Deck	2,3
Body wiping	Paint Shop	1,3,5
Body Shop highlight wipes	Body Shop	1,3,5
Urethane cleanup	Windshield Install	2,3

B. Coating line purging emissions (63.3094 (c)(1)(ii))

LGR will use one or more of the following for minimizing organic HAP emissions from coating line purging processes:

1. Air/solvent push-out.
2. Capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips).
3. Block painting to the maximum extent feasible.
4. Use of low-HAP or no-HAP solvents for purge.

The following table identifies the purging operations and the technique(s) in use.

Operation	Location	Technique
Primer Surfacer	Paint Shop	2,3
Basecoat	Paint Shop	3,4
Clearcoat	Paint Shop	2,3

C. Flushing of coating systems (63.3094 (c)(1)(iii))

LGR will use one or more of the following for minimizing organic HAP emissions from the flushing of coating systems:

1. Keeping solvent tanks closed.
2. Recovering and recycling solvents.
3. Keeping recovered/recycled solvent tanks closed.
4. Use of low-HAP or no-HAP solvents

Operation	Location	Technique
Basecoat	Paint Shop	1,2,3
Clearcoat	Paint Shop	1,2,3
Prime	Paint Shop	1,2,3

D. Cleaning of spray booth grates (63.3094 (c)(1)(iv))

LGR will use one or more of the following for minimizing organic HAP emissions from the cleaning of spray booth grates:

1. Controlled burn-off.
2. Rinsing with high-pressure water (in place).
3. Rinsing with high-pressure water (off line).
4. Use of spray-on masking or other type of liquid masking.
5. Use of low-HAP or no-HAP content cleaners.

The following table identifies the spray booth and the technique(s) in use.

Operation	Location	Technique
Prime booths	Paint Shop	2
Basecoat booths	Paint Shop	2
Clearcoat booths	Paint Shop	2
Spot Repair booths	Paint Shop	N/A
Final Repair booth	General Assembly	N/A

E. Cleaning of spray booth walls (63.3094 (c)(1)(v))

LGR will use one or more of the following for minimizing organic HAP emissions from the cleaning of spray booth walls:

1. Use of masking materials (contact paper, plastic sheet, or other similar type of material).
2. Use of spray-on masking.
3. Use of rags and manual wipes instead of spray application when cleaning walls.
4. Use of low-HAP or no-HAP content cleaners.
6. Controlled access to cleaning solvents.

The following table identifies the spray booth and the technique(s) in use:

Operation	Location	Technique
Prime booths	Paint Shop	2
Basecoat booths	Paint Shop	2
Clearcoat booths	Paint Shop	2
Spot repair booths	Paint Shop	N/A
Final Repair booth	General Assembly	N/A

F. Cleaning of spray booth equipment (63.3094 (c)(1)(vi))

LGR will use one or more of the following for minimizing organic HAP emissions from the cleaning of spray booth equipment:

1. Use of covers on equipment (disposable or reusable).
2. Use of parts cleaners (off-line submersion cleaning).
3. Use of spray-on masking or other protective coatings.
4. Use of low-HAP or no-HAP content cleaners.
5. Controlled access to cleaning solvents.

The following table identifies the spray booth equipment and the technique(s) in use:

Operation	Location	Technique
Prime robots and applicators	Paint Shop	1,2
Basecoat booth robots and applicators	Paint Shop	1,2
Clearcoat booth robots and applicators	Paint Shop	1,2
Spot Repair booth applicators	Paint Shop	2
Final Repair booth applicators	General Assembly	2

G. Cleaning of external spray booth areas (63.3094 (c)(1)(vii))

LGR will use one or more of the following for minimizing organic HAP emissions from the cleaning of spray booth areas:

1. Use of removable floor coverings (paper, foil, plastic, or similar type of material).
2. Use of manual and/or mechanical scrubbers, rags, or wipes instead of spray application.
3. Use of shoe cleaners to eliminate coating track-out from spray booths.
4. Use of booties or shoe wraps.
5. Use of low-HAP or no-HAP content cleaners.
6. Controlled access to cleaning solvents.

The following table identifies the area and the technique(s) in use:

Area	Location	Technique
Cleanroom	Paint Shop	2,5
Spot Repair	Paint Shop	2,5
Final Repair	General Assembly	2,5
White Floor Areas – Outside of Booths	Paint Shop	2,3,4,5,6
Paint Mix Room	Paint Shop	2
ELPO/Phosphate	Paint Shop	1,2

H. Housekeeping measures not addressed elsewhere in the plan (63.3094 (c)(1)(viii))

LGR will use one or more of the following for minimizing organic HAP emissions from housekeeping measures not addressed elsewhere in the plan:

1. Keeping solvent-laden articles (cloths, paper, plastic, rags, wipes, and similar items) in covered containers when not in use.
2. Storing new and used solvents in closed containers.
3. Transferring of solvents in a manner to minimize the risk of spills.

The following table identifies the area and the technique(s) in use:

Area	Location	Technique
Paint Mix Room – general cleaning	Paint Shop	1,2,3
High traffic areas – general cleaning	Paint Shop	1,2,3
ELPO / phosphate aisle general cleaning	Paint Shop	1,2,3
Storage of Solvent Wipes	Paint Shop	1,2

IV. Plan Communication

The requirements of this work plan will be communicated to *LGR* employees and contract employees as appropriate to ensure that the elements of the work plan are properly implemented.

Methods of communication include:

1. Task Instruction Sheets
2. Hazardous materials communications
3. Team Meetings
4. Employee instruction
5. Work Plans

V. Inspection Requirements / Corrective Action

LGR environmental engineers, or their designees, will perform inspections once per Title V deviation reporting period to ensure that the elements of the work plan are properly implemented. The “Work Practice Plan Appendix” will be used to document the inspections and resulting corrective actions, if applicable.

VI. Plan Updates

This work practice plan will be reviewed once during each Title V deviation reporting period (i.e. quarterly/semi-annually) and updated as appropriate by the *LGR* environmental engineer. You must document every review regardless of updates to the plan. Document your review in section XII.

VIII. Title V Permit (63.3094 (e))

This work practice plan is not incorporated into *LGR* Title V permit. Revisions to the plan do not constitute revisions to *LGR* Title V permit. Nonconformances to this work practice plan do not constitute Title V permit deviations.

IX. Plan Retention (63.3094 (f))

Copies of the current work practice plans, as well as plans developed within the preceding 5 years must be available on-site for inspection and copying by the permitting authority.

X. Definitions

Closed: A container is “closed” if its top, lid, hatch, or other opening mechanism is in the closed position. Containers requiring pumps or other devices inserted into the container are considered “closed” if the pump or other device is securely installed.

Storage: A container used for the storage of a HAP containing material is one in which no mixing or conveyance takes place. Examples may include totes, drums, and buckets.

HAP materials: refers to organic HAP-containing coatings, thinners, cleaning materials, and waste materials, as applicable pursuant to 40 CFR Part 63 Subpart IIII.

XI. Document Responsibilities

Environmental Engineer or Designee: Controls work practice plan document and conducts inspections and plan review.

Site Personnel: Utilizes appropriate work practices identified in the work practice plan and supports inspections and review.

XII. Plan Review

Document plan review below per Section VI:

Review Date:	Document Reviewer:	Revisions/Review Comments:
8/10/2016	Jim Ecklund	Began using new template
3/2017	Jim Ecklund	No changes
9/2017	Jim Ecklund	No changes
3/12/2018	Jim Ecklund	No changes
3/27/2018	Jim Ecklund	Minor updates
8/31/2018	John Maksimchuk	No changes
3/8/2019	Irene Bashore	Updated formatting
8/29/2019	Melissa Phipps	No changes
3/4/2020	Melissa Phipps	No changes
8/6/2020	Melissa Phipps	No changes
3/8/2021	Melissa Phipps	No changes
8/30/2021	Melissa Phipps	No changes
12/20/2021	Brent Cousino	Minor updates
3/14/2022	Brent Cousino	No changes