

Mike DeWine, Governor Jon Husted, Lt. Governor Laurie A. Stevenson, Director

JUNE 27, 2019

Kyle Stechschulte Honda of America Mfg., Inc. 12500 Meranda Road Anna, OH 45302 Re: Honda of America Mfg Inc Anna Engine Plant

Permit – Short Term

Approval Beneficial Use

Shelby BENU023357

Subject: Honda of America Mfg Inc Anna Engine Plant

Land Application Management Plan Permit Approval and Incorporated

Exemption

Water Treatment Materials

Effective Date: JUNE 27, 2019

Expiration Date: JUNE 27, 2024

Ohio EPA JUN 27'19 Entered Directors Journal

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the land application management plan (LAMP) permit application submitted by Honda of America Mfg., Inc. Anna Engine Plant (Honda AEP). This LAMP permit and exemption (LAMP Permit), issued pursuant to Chapters 3734 and 6111 of the Ohio Revised Code (ORC), authorizes Honda AEP to land apply water treatment materials (WTM) for agronomic benefit as a liming material.

Honda AEP, located in Anna, Ohio, operates two water treatment plants that provide water to their facility. The Industrial Water Plant treats source water for use in manufacturing processes. After manufacturing use, Honda AEP pre-treats the industrial wastewater in order to remove metals then discharges the wastewater to the City of Sidney for final wastewater treatment. The Potable Water Plant treats source water for use throughout Honda AEP's campus for personal use. Both water plants generate WTM which are pumped into a shared lime lagoon. Both water treatment plants use ground water as source water.

The Director of Ohio EPA (Director) has determined that issuing this LAMP Permit to land apply WTM in the quantities and under the circumstances specifically authorized in this LAMP Permit is unlikely to adversely affect public health or safety or the environment.

This LAMP Permit is issued pursuant to ORC Chapters 3734 and 6111 for the land application of WTM for agronomic benefit as a liming material. Pursuant to the authority of the Director under ORC Chapters 3734 and 6111, this LAMP Permit for Honda AEP is approved subject to compliance with the LAMP Permit application and all conditions below.

Further, the Director has determined that granting an exemption from the applicable solid waste licensing, permitting, and disposal fee provisions of ORC Chapter 3734 to use WTM under the circumstances specifically authorized in this LAMP Permit is unlikely to adversely affect public health or safety or the environment. Therefore, pursuant to ORC Section 3734.02(G), the Director

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hereby exempts Honda AEP from the applicable solid waste licensing, permitting, and disposal fee provisions of ORC Chapter 3734 and rules adopted thereunder specific to the land application of WTM as authorized in this LAMP Permit except as specifically stated in Condition 26.

CONDITIONS

1. As used in the LAMP Permit:

- a. "Agronomic benefit" means the promotion or enhancement of plant growth and includes but is not limited to increases in soil fertility and moisture retention.
- b. "Dewatered" means the material has no free liquids as determined by *Test Methods* for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)¹ Test Method 9095B: Paint Filter Liquids Test.
- c. "Fill" means material placed on the ground in order to fill an existing depression or hole in the ground, create mounds, or otherwise artificially change the grade or elevation of the property.
- d. "Liming material" means all material, the calcium and magnesium content of which is used to neutralize soil acidity, and includes the oxide, hydrate, carbonate, and silicate, or combinations of those forms.
- e. "Occupied building" means a structure, permanent in nature, where one or more human beings may be present.
- f. "Saturated soil" means all of the pore spaces in the soil are filled with water. A soil that has an available water capacity above field capacity is considered saturated.
- g. "Snow covered ground" means soil or residue lying on the soil cannot be seen because of snow cover, or soil covered by one-half inch or more of ice.
- h. "Structural fill" means material used to create a stable base that both meets the applicable engineering specifications for and is used as engineered fill, mechanically stabilized earthen walls, or granular fill.
- i. "Water Treatment Material" means a byproduct resulting from the treatment of Honda AEP's source water supply for Industrial and Potable water.
- j. "Waters of the state" has the same meaning as in section 6111.01(H) of the Revised Code.
- This LAMP Permit authorizes the land application of WTM that are managed in accordance with this LAMP Permit. Pursuant to this LAMP Permit WTM may be land applied for agronomic benefit as a liming material. This authorization shall not be construed to authorize any other use of WTM.

¹ EPA publication SW-846, "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846)," as amended through July 2016.

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- Only WTM that are not a hazardous waste as defined by ORC Chapter 3734, Ohio Administrative Code (OAC) Rule 3745-50-10(A), and OAC Rule 3745-51-03, is eligible for land application under this LAMP Permit. All other WTM land applications must be separately approved by Ohio EPA. Analysis and additional information submitted to Ohio EPA by Honda AEP on April 08, 2019, demonstrated the WTM are not hazardous waste.
- 4. Honda AEP shall provide a copy of this LAMP Permit to the recipient of any WTM intended for land application.
- 5. The WTM shall be land applied in accordance with the conditions of this LAMP Permit. Approval of this LAMP Permit does not constitute an assurance that land application of WTM in accordance with the LAMP Permit will be in compliance with all Ohio laws and regulations.
- 6. Honda AEP is responsible for identifying and obtaining any additional authorizations necessary to land apply WTM as described in this LAMP Permit. Except for the solid waste licensing, permitting, and disposal fee provisions of ORC Chapter 3734 and rules adopted thereunder exempted above, issuance of this LAMP Permit to Honda AEP neither relieves Honda AEP of the duty to comply with nor authorizes Honda AEP to conduct activities in violation of any applicable federal, state, or local laws, ordinances, or regulations. All activities shall be accomplished in compliance with all federal, state, or local laws and regulations pertaining to environmental protection, including but not limited to the control of air pollution, leachate, and storm water run-on and run-off and protection of ground water and surface water.
- 7. Honda AEP shall collect and analyze at least one representative composite sample per calendar year of the WTM intended for land application pursuant to this LAMP Permit. Prior to land application, Honda AEP shall collect and analyze an additional representative composite sample if a "material change", as that term is defined in OAC Rule 3745-599-02(M)(2), in the WTM is discovered. Honda AEP shall representatively sample and analyze the WTM samples as follows:
 - a. The WTM samples collected shall be representative of the WTM intended to be land applied pursuant to this LAMP Permit;
 - Each composite sample of WTM shall be collected by taking a minimum of two discreet samples of WTM and compositing the discreet samples into one composite sample for analysis;
 - Each composite sample shall be analyzed for total metals, as described in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, for the constituents listed in Table 1 and any additional constituents that Ohio EPA has identified in writing to Honda AEP as requiring testing;
 - The reported detection limit for the sample analysis shall be less than the limit specified for each constituent in Table 1 and the constituent concentration limit specified for additional constituents where Ohio EPA has identified in writing as requiring testing;
 - d. One composite sample of WTM shall be analyzed for the Resource Conservation and Recovery Act heavy metals (RCRA 8 metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) for leaching potential using the Toxicity

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Characteristic Leaching Procedure (TCLP) Method 1311 as described in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, to demonstrate that the WTM is not a hazardous waste as defined in ORC Section 3734.01, OAC Rule 3745-50-10(A), OAC Rule 3745-51-03.

Table 1: Constituent Concentration Limits

Constituent ^{2,3}	Totals Analysis ⁴ (mg/kg)
Aluminum ⁵	50,000
Arsenic (As)	41
Barium (Ba)	15,000
Cadmium (Cd)	39
Copper (Cu)	1,500
Lead (Pb)	300
Manganese (Mn)	1,800
Nickel (Ni)	420
Selenium (Se)	100
Zinc (Zn)	2,800

^{* -} dry weight basis

8. Honda AEP shall not land apply or make available or distribute for land application any WTM that contains constituents at levels that exceed any of the constituent concentration limits specified in Table 1 of this LAMP Permit or any constituent concentration limit for any additional constituent that Ohio EPA has identified to Honda AEP, in writing, as requiring testing. Analysis submitted to Ohio EPA by Honda AEP on April 08, 2019 demonstrated no constituents in the sample analyzed exceeded the Table 1 limits.

STORAGE CONDITIONS

- 9. Honda AEP may store dewatered WTM at the site of land application for up to 180 days. Honda AEP shall use Best Management Practices when storing WTM including, at a minimum, all the following:
 - Minimizing the exposure of WTM to rain, snow, snowmelt, and runoff throughout the storage, processing, and staging of the WTM (including loading and unloading, cleaning, and maintenance operations);

² Ba, Mn: US EPA Regional Screening Levels, Residential Soil.

³ As, Cd, Cu, Pb, Ni, Se, Zn: US EPA 40 CFR Part 503 Pollutant Concentrations (Table 3 of 503.13).

⁴ EPA publication SW-846, "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846)," Section 1.2 of the TCLP Method 1311 does allow for a total constituent analysis in lieu of the TCLP extraction. "If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run."

⁵ With aluminum concentrations exceeding 50,000 mg/kg, special care may be needed to prevent plant phosphorus deficiency. "High aluminum" materials should be considered for phosphorus sorption. Elizabeth Dayton et al, *Beneficial Use of Aluminum-Based Drinking Water Treatment Residuals (WTR): Urban and Agricultural Applications Final Report* (The Ohio State University School of Environment and Natural Resources, 2016).

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- b. The use of grading, berming, or curbing to prevent WTM runoff and divert run-on away from storage areas;
- c. Providing and maintaining a 50-foot undisturbed natural buffer around surface waters of the state, directing storm water to vegetated areas to increase sediment removal and maximize storm water infiltration;
- Locating all WTM storage areas at least 300 feet from occupied buildings unless a reduction in this distance is approved, in writing, by the land owner and, if applicable, the resident of the occupied building;
- e. Locating all WTM storage areas at least 300 feet from wells and surface waters used for drinking water or watering livestock and at least 100 feet from other surface waters of the state as defined in ORC Section 6111.01(H);
- f. Unless otherwise provided in a permit issued under ORC Chapter 6111, creating surface water diversions to catch any solids in runoff and to divert runoff away from waters of the state at each site where WTM are stored on land;
- g. Taking measures to control fugitive dust and other air emissions that may result from activities authorized through this LAMP Permit;
- h. Not storing WTM in areas that are either over or within a sensitive groundwater area, including any of the following:
 - i. Karst terrain;
 - A sand and gravel pit;
 - iii. A limestone or sandstone quarry;
 - iv. A drinking water source protection area with less than ten feet of low permeability clayey glacial till between the bottom of the fill material and the ground water:
 - v. An aquifer designated on an Ohio Department of Natural Resources Ground Water Resources map for the county in which the land application will take place as capable of yielding one hundred gallons-per minute or more, which has less than ten feet of separation between the bottom of the fill material and the ground water.
- Except for storage as authorized by Condition 9, Honda AEP shall obtain a permit to install
 and any other applicable authorization from Ohio EPA Division of Surface Water prior to
 dewatering or storing WTM.

WTM LAND APPLICATION CONDITIONS

- 11. Honda AEP shall not use WTM as fill or structural fill under this Permit.
- 12. Honda AEP shall not place WTM in any area described in ORC Section 3734.02(M), including within the boundaries of a state park, a state park purchase area, any unit of the national park system, any property that lies within the boundaries of a national park or

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recreation area that is located in this state, or any candidate area located in this state and identified for potential inclusion in the national park system.

- 13. Honda AEP shall store and land apply WTM only in a manner that neither creates a nuisance nor adversely affects public health or safety or the environment. The Director may revoke this Permit if the Director determines that a nuisance condition or a threat to human health, safety, or the environment exists. Immediately upon the effective date of any written notification from the Director of revocation of this LAMP Permit, Honda AEP shall cease land application under this LAMP Permit. The Director may require Honda AEP to remove the material, remediate the site, or to take other action as appropriate to eliminate the nuisance or threat.
- 14. Honda AEP shall not land apply, make available, or distribute for land application any WTM under this Permit for which the 95% UCL of the mean exceeds any constituent concentration limit specified in Table 1 of this Permit.
- 15. When there is a substantial change in the water treatment processes, as defined in OAC Rule 3745-91-01, prior to land applying the WTM under this Permit, Honda AEP shall determine constituent concentrations for each constituent listed in Table 1 through additional sampling and analysis, performed in accordance with Condition 7 of this LAMP Permit. Honda AEP may land apply WTM generated after the substantial change under this LAMP Permit only if a statistical evaluation of the results of the additional sampling analysis demonstrates that the 95% UCL of the mean for each constituent concentration does not exceed the limits specified in Table 1.
- 16. After the most recent liming application, but not more than twelve months prior to land application, Honda AEP shall determine the pH of the soil at the land application site in accordance with Ohio State University Extension "Soil Sampling to Develop Nutrient Recommendations (AGF 513-12)". Honda AEP shall not land apply WTM pursuant to this Permit at any site where the soil has a pH equal to or greater than 7.5.
- 17. Honda AEP shall calculate the per acre application rate for each land application site upon which Honda AEP intends to land apply WTM pursuant to this Permit. Honda AEP shall ensure that the application rate will not result in a total liming rate that exceeds the equivalent of six dry tons of WTM being applied per acre over a three-year period. When calculating the appropriate application rate, Honda AEP shall perform of all of the following:
 - a. Consult Ohio State University Extension Nutrient Management Fertility Factsheets, Bulletins and Tools website https://agcrops.osu.edu/FertilityResources;
 - b. Base the application rate on the ideal soil pH range for the crop to be grown, the existing soil pH, and the effective neutralizing power of the WTM (as determined by the most recent sampling results of the WTM);
 - Consider the potential for runoff of the WTM, either by itself or carried in storm water;
 and
 - d. Determine the available water capacity of the soil in accordance with Appendix B of OAC Rule 901:10-2-14 and, for non-dewatered WTM, ensure that the application rate does not exceed the available water capacity of the soil, or 10,000 gallons per acre per week, whichever is less.

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- 18. Honda AEP shall not apply WTM at a rate greater than the application rate calculated in accordance with Condition 17.
- 19. Honda AEP shall use Best Management Practices when applying WTM on the ground for agronomic benefit as a liming material pursuant to this LAMP Permit including, at a minimum, all of the following:
 - a. WTM shall not be land applied within 300 feet of an occupied building, unless a reduction in this distance for land application of DWTM is approved, in writing, by the land owner and, if applicable, the resident of the occupied building;
 - b. WTM shall not be land applied within 300 feet of wells and surface waters used for drinking water or watering livestock or within 100 feet of wells and surface waters used for drinking water or watering livestock if there is a 100-foot grass buffer between the land application area and wells and surface waters used for drinking water or watering livestock;
 - c. WTM shall not be land applied within 33 feet of surface waters of the state that are not referenced in Condition 19.b;
 - d. WTM shall not be land applied during precipitation;
 - e. WTM shall not be land applied to saturated soil;
 - f. WTM shall not be applied onto frozen or snow-covered ground; and
 - g. Measures shall be taken to control fugitive dust and other air emissions that may result from activities authorized through this LAMP Permit.
- 20. When land applying WTM pursuant to this LAMP Permit, Honda AEP shall use application methods that ensure even distribution of the WTM. Honda AEP shall not apply WTM by means of injection of WTM.

RECORD KEEPING AND REPORTING

- 21. The following records shall be maintained by Honda AEP for a minimum of 5 years after the land application of WTM pursuant to this LAMP Permit, and shall be made available to Ohio EPA upon request:
 - Records of the annual volume of WTM made available for land application and the volume of WTM actually land applied annually;
 - Documentation demonstrating that the WTM are not a hazardous waste as defined by ORC Section 3734.01, OAC Rule 3745-50-10(A), and OAC Rule 3745-51-03;
 - c. Records of each location where the WTM are stored, blended, or placed on land;
 - The sampling and analysis plan detailing where and how samples of WTM were collected, dates that the samples were collected, and the list of constituents from Table 1 for which samples were analyzed;

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- e. All laboratory data and analyses of the pH and constituent concentrations listed in Table in the WTM;
- f. Records of precipitation on days WTM was land applied;
- g. Records of the application rate calculations and results of soil pH for each beneficial use site; and
- h. Copies of liming material licenses required by ORC Section 905.52.
- 22. Not later than April first of each year Honda AEP shall submit to Ohio EPA an annual report. Honda AEP shall send the annual report to the address listed in Condition 23 of this Permit, and shall include the following information for the previous calendar year:
 - a. Volume of WTM land applied under this Permit;
 - b. Volume of WTM stored for land application under this Permit as of the date of the annual report; and
 - c. Results of sampling analyses of WTM land applied under this Permit.
- 23. Honda AEP shall submit the annual report to one of the following addresses:

For mailings:

Ohio Environmental Protection Agency Division of Materials and Waste Management Attn: Beneficial Use Unit P.O. Box 1049 Columbus, Ohio 43216-1049

or

For hand delivery:

Ohio Environmental Protection Agency Lazarus Government Center Division of Materials and Waste Management Attn: Beneficial Use Unit 50 West Town Street Columbus, Ohio 43215

GENERAL OPERATING CONDITIONS

- 24. Honda AEP shall conduct all activities in compliance with all federal, state, or local laws, ordinances, or regulations pertaining to environmental protection, including but not limited to the control of air pollution, leachate, and storm water run-on and run-off and protection of groundwater and surface water.
- 25. WTM are solid waste and would require Honda AEP to obtain a permit and license under ORC Chapter 3734 and the rules promulgated thereunder for disposal. The Director has determined that granting an exemption from certain solid waste provisions of ORC Chapter

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3734 to land apply WTM in the quantities and under the circumstances specifically authorized in this LAMP Permit is unlikely to adversely affect public health or safety or the environment. Therefore, pursuant to ORC Section 3734.02(G), the Permittee is hereby exempted from the applicable solid waste licensing, permitting, and fee provisions of ORC Chapter 3734 and the rules adopted thereunder except as specifically stated in Condition 26, subject to compliance with all conditions in this LAMP Permit.

- 26. Pursuant to ORC Section 3734.02(G) and OAC Rule 3745-27-03(B), Honda AEP is hereby exempted from the requirement to collect and remit the state solid waste disposal fee levied under ORC Section 3734.57(A) for use of WTM in accordance with this LAMP Permit. Honda AEP is not exempted from the obligation to collect and remit all applicable solid waste management district disposal and generation fees levied under ORC Sections 3734.57(B) and 3734.573 and any host community fee levied under ORC Section 3734.57(C).
- 27. Nothing in this LAMP Permit shall be construed as a waiver from the requirements of ORC Chapter 3734 or the regulations promulgated thereunder, except as expressly provided herein. This LAMP Permit shall not be interpreted to release Honda AEP from responsibility under ORC Chapters 3704, 3734, or 6111; under the Federal Clean Water Act, the Resource Conservation and Recovery Act, or the Comprehensive Environmental Response, Compensation, and Liability Act; or from other applicable requirements for remedying conditions resulting from any release of contaminants to the environment.
- 28. Honda AEP shall not cause pollution or place or cause to be placed any WTM where it causes pollution to any waters of the state, except in accordance with an effective National Pollutant Discharge Elimination System permit. Honda AEP shall report any unauthorized discharge to waters of the state to Ohio EPA within twenty-four hours of discovery.
- Honda AEP shall provide written notice to the Director within seven days of discovering noncompliance with this LAMP Permit.
- 30. A copy of this LAMP permit shall be given to all distributors that manage WTM for agronomic benefit when the WTM are an ingredient in a soil blend and Honda AEP shall obtain a written agreement or receipt from the distributors, agreeing to follow the conditions of this LAMP permit.
- 31. The Director may add, delete, or change any conditions of this LAMP Permit to protect human health or safety or the environment.
- 32. Honda AEP shall furnish to the Director, or an authorized representative of Ohio EPA, within 30 days of receiving a written request, any information that the Director or an authorized representative of Ohio EPA requests to determine whether cause exists for revoking coverage under or determining compliance with this LAMP Permit.
- 33. This LAMP Permit and the authorization to land apply WTM shall expire at midnight on the expiration date shown above. In order to receive authorization to land apply WTM beyond the above date of expiration, Honda AEP shall submit such information and forms as are required by Ohio EPA not later than 180 days prior to the above date of expiration.
- 34. Honda AEP shall allow the Director or an authorized representative of Ohio EPA to enter upon the property where Honda AEP stores or has placed WTM, conducts other activities

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under this LAMP Permit, or retains records under the terms and conditions of this LAMP Permit, for the following purposes:

- To inspect and copy records that must be kept under the terms and conditions of this LAMP Permit.
- b. To collect samples, perform monitoring, take photographs, perform measurements, surveys, and other tests; and inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this LAMP Permit.
- c. For all other purposes for which the Director or an authorized representative of Ohio EPA has rights of access or inspection authority under applicable law.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to ORC Section 3745.04. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission 30 East Broad Street, 4th Floor Columbus, Ohio 43215

Questions concerning this LAMP Permit should be directed to Ohio EPA's Beneficial Use Unit at (614) 644-2621.

Sincerely,

Laurie A. Stevenson

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Director

LAS/PC