



Kate Brown, Governor

Western Region Eugene Office 165 East 7th Avenue, Suite 100 Eugene, OR 97401 (541) 686-7838 FAX (541) 686-7551 TTY 711

March 1, 2018

Christopher Stapleton, President American Gypsum Recycling, Inc. 20650 NE Halsey St., Apt. Q162 Fairview, OR 97024

RE: Beneficial Use Determination Approval BUD No. BUD-20180205-AGR AGR, Reclaimed Wallboard Marion County, Project 8122

Dear Mr. Stapleton:

DEQ reviewed American Gypsum Recycling Inc.'s application for a solid waste beneficial use determination received in our Medford office on Jan. 25, 2018. AGR Inc. proposes to reclaim **asbestos-free** new construction (clean) wallboard, and used (painted and/or textured) wallboard waste material to be beneficially used as: concrete feedstock; new wallboard feedstock; soil amendment, compost feedstock and animal bedding. The gypsum will be a substitute for gypsum mined from quarries; and the paper backing will be a substitute for conventional animal bedding materials and compost feedstock.

DEQ has determined that AGR Inc.'s beneficial use proposal meets the requirements for a Tier 2 case-specific Beneficial Use Determination under OAR 340-093-0260 through 0290. DEQ's determination is based on a review of whether AGR Inc.'s proposed beneficial uses of waste wallboard meet the case-specific beneficial use performance criteria outlined in OAR 340-093-0280. Details of our review are provided in the attached Beneficial Use of Solid Waste Determination Evaluation Form.

This BUD approval is limited to the materials, approved uses, and conditions specified in this letter and in the table below. The conditions of this BUD approval are intended to prevent adverse impacts to public health, safety, welfare and the environment from the use of reclaimed wallboard wastes.

AGR Inc. may transfer materials reclaimed from wallboard to the public for the uses identified below:

Solid Waste	Case-Specific Beneficial Use	Conditions of Use
Reclaimed gypsum from asbestos-free	#1: Feedstock substitute for concrete	<ol> <li>The reclaimed gypsum must not contain concentrations of hazardous substances above DEQ approved human health occupational risk-based screening levels.</li> </ol>
new construction wallboard (clean: unpainted, un- textured, uncontaminated)	production	2. The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water, or wetland areas.
		3. AGR Inc, must notify prospective users of the conditions of use and provide a copy of this BUD approval.
		<ol> <li>In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard</li> </ol>

	and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions.
5.	Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.
6.	AGR Inc. must keep records containing the information in #5 above for five years.
7.	If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.

	Conditions of Use
Beneficial Use	
#2: Feedstock substitute for new wallboard production	<ol> <li>The reclaimed gypsum must not contain concentrations of hazardous substances above DEQ approved human health occupational risk-based screening levels.</li> <li>The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in</li> </ol>
	ways that would allow discharge to groundwater, surface water, or wetland areas.
	3. AGR Inc. must notify prospective users of the conditions of use and provide a copy of this BUD approval.
	4. In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions.
	5. Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.
	<ol> <li>AGR Inc. must keep records containing the information in #5 above for five years.</li> </ol>
	substitute for new wallboard

	<ol> <li>If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluate to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.</li> </ol>
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Solid Waste	Case-Specific	Conditions of Use
Sona wase	Beneficial Use	
Reclaimed gypsum from <b>asbestos-free</b> new construction wallboard (clean: unpainted, un- textured, uncontaminated)	#3: Soil amendment in agricultural applications	<ol> <li>The reclaimed gypsum must not contain concentrations of hazardous substances above DEQ-approved human health occupational risk-based screening levels or naturally occurring background, whichever is higher.</li> <li>The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water or wetland areas.</li> <li>AGR Inc, must notify prospective users of the conditions of use and provide a copy of this BUD approval.</li> <li>The use must conform to all Oregon Department of Agriculture requirements and must be applied at agronomic rates.</li> <li>In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions.</li> <li>Every year, AGR Inc. must submit a report to DEQ</li> </ol>
		identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.
		<ol> <li>AGR Inc. must keep records containing the information in #6 above for five years.</li> </ol>
		8. If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.

Reclaimed gypsum from asbestos-free demolition wallboard (may be painted, textured, or contain other construction#4: Feedstock substitute for concrete production1. The reclaimed gypsum must not contain concentrations of hazardous substances above DEQ-approved human health occupational risk-based screening levels.2. The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water, or wetland areas.3. AGR Inc, must notify prospective users of the conditions of use and provide a copy of this BUD approval.4. In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions.5. Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.	Solid Waste	Case-Specific Beneficial Use	Conditions of Use
<ul> <li>6. AGR Inc. must keep records containing the information in #5 above for five years.</li> <li>7. If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.</li> </ul>	gypsum from asbestos-free demolition wallboard (may be painted, textured, or contain other contaminates from standard construction practices: such as fasteners, caulks,	#4: Feedstock substitute for concrete	<ul> <li>hazardous substances above DEQ-approved human health occupational risk-based screening levels.</li> <li>2. The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water, or wetland areas.</li> <li>3. AGR Inc, must notify prospective users of the conditions of use and provide a copy of this BUD approval.</li> <li>4. In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions.</li> <li>5. Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.</li> <li>6. AGR Inc. must keep records containing the information in #5 above for five years.</li> <li>7. If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening</li> </ul>

Solid Waste	Case-Specific Beneficial Use		Conditions of Use
Reclaimed gypsum from <b>asbestos-free</b> demolition wallboard (may be painted, textured, or contain other contaminates from standard construction practices: such as fasteners, caulks, insulation)	Beneficial Use #5: Feedstock substitute for new wallboard production	5.	The reclaimed gypsum must not contain concentrations of hazardous substances above DEQ approved human health occupational risk-based screening levels. The waste wallboard and reclaimed gypsum must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water, or wetland areas. AGR Inc, must notify prospective users of the conditions of use and provide a copy of this BUD approval. In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the waste wallboard and reclaimed gypsum, must store and manage the material to prevent releases to the environment and nuisance conditions. Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year. AGR Inc. must keep records containing the information in #5 above for five years. If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.

Solid Waste	Case-Specific Beneficial Use	Conditions of Use
Reclaimed paper backing from <b>asbestos-free</b> new construction wallboard (clean: unpainted, un- textured, uncontaminated) and NOT to include "greenboard" which may contain other un-	#6: Compost feedstock	<ol> <li>The reclaimed paper backing must not contain concentrations of hazardous substances above DEQ approved human health occupational risk-based screening levels.</li> <li>The paper backing must not be stored near water or wetland areas and must not be stored in ways that would allow discharge to groundwater, surface water, or wetland areas.</li> <li>AGR Inc. must notify prospective users of the conditions of use and provide a copy of this BUD approval.</li> </ol>

evaluated constituents such as fungicides or any quantities of gypsum greater than incidental	<ul> <li>In accordance with OAR 340-093-0280(3)(b), until the time the material is used under the BUD conditions specified, AGR Inc. and any person that receives the paper backing, must store and manage the material to prevent releases to the environment and nuisance conditions.</li> </ul>
amounts	5. Every year, AGR Inc. must submit a report to DEQ identifying the amount of "clean" wallboard received, the amount of gypsum generated, the amount of gypsum transferred to others for re-use, and to whom and for what purpose. Per OAR 340-097-0120(2)(f), AGR Inc. must include the \$250 reviewing fee with the annual report. The report is due on Feb. 1 of each year.
	<ol> <li>AGR Inc. must keep records containing the information in #5 above for five years.</li> </ol>
	7. If manufacturing processes, chemical characteristics, physical characteristics and/or end uses are modified, AGR Inc. must first have the material re-evaluated to confirm hazardous substances in material are below risk screening levels, prior to beneficial use.

AGR Inc. has conveyed to DEQ that the paper backing from the used (unclean) wallboard and the paper backing from "greenboard" will both be landfilled. Those materials are not approved for re-use under this BUD.

All approved uses must also comply with applicable federal, state and local regulations.

AGR Inc. may demonstrate that the purchaser will meet the conditions that apply to use by having the purchaser sign an agreement that they have been informed of the requirements to manage the reclaimed materials according to these conditions and those detailed in the BUD application.

No other uses are approved. AGR Inc. must apply for a new BUD for any additional uses.

If you have any questions about this BUD, please contact David Esch at 541-776-6148 or esch.david@deq.state.or.us

Sincerely,

Brian Fuller, Manager Western Region Hazardous and Solid Waste Permitting and Compliance

encl: Beneficial Use of Solid Waste Determination Evaluation Form

ec: David Esch, DEQ-Medford, <u>esch.david@deq.state.or.us</u> Denise Miller, DEQ-Eugene, <u>miller.denise@deq.state.or.us</u>

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