

By Senator Diaz

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1                                   A bill to be entitled  
2       An act relating to construction materials mining  
3       activities; amending s. 552.30, F.S.; requiring that  
4       the statewide ground vibration limits established by  
5       the State Fire Marshal be based on frequency and  
6       particle velocity; requiring the State Fire Marshal to  
7       establish certain regulations relating to blasting  
8       operations conducted in connection with construction  
9       materials mining activities; requiring persons  
10      permitted by the State Fire Marshal to submit written  
11      notification relating to construction materials mining  
12      activities to certain counties and municipalities;  
13      requiring the State Fire Marshal to create a form for  
14      complaint reports regarding blasting operations  
15      conducted in connection with construction materials  
16      mining activities; requiring that complaint reports be  
17      submitted to the State Fire Marshal and include  
18      certain information; providing requirements relating  
19      to training and continuing education for persons  
20      engaged in construction materials mining activities;  
21      requiring that certain mining permits issued on or  
22      after a specified date be issued for a period of 5  
23      years; requiring the State Fire Marshal to suspend  
24      mining permits issued on or after a specified date  
25      under certain circumstances; requiring the State Fire  
26      Marshal to conduct or contract for a report on the  
27      feasibility of conducting a specified study; requiring  
28      the State Fire Marshal to submit a report to the  
29      Legislature by a specified date; requiring that the

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30 report contain certain information; providing an  
31 effective date.

32  
33 Be It Enacted by the Legislature of the State of Florida:

34  
35 Section 1. Subsections (1) and (2) of section 552.30,  
36 Florida Statutes, are amended, and subsections (4) through (9)  
37 are added to that section, to read:

38 552.30 Construction materials mining activities.—

39 (1) Notwithstanding the provisions of s. 552.25, the State  
40 Fire Marshal has ~~shall have~~ the sole and exclusive authority to  
41 promulgate standards, limits, and regulations regarding the use  
42 of explosives in conjunction with construction materials mining  
43 activities. Such authority to regulate use includes ~~shall~~  
44 ~~include~~, directly or indirectly, the operation, handling,  
45 licensure, or permitting of explosives and setting standards or  
46 limits, including, but not limited to, ground vibration,  
47 frequency, intensity, blast pattern, air blast and time, date,  
48 occurrence, and notice restrictions. As used in this section,  
49 the term "construction materials mining activities" means the  
50 extraction of limestone and sand suitable for production of  
51 construction aggregates, sand, cement, and road base materials  
52 for shipment offsite by any person or company primarily engaged  
53 in the commercial mining of any such natural resources.

54 (2) The State Fire Marshal shall establish statewide ground  
55 vibration limits, based on both frequency and particle velocity,  
56 for construction materials mining activities which conform to  
57 those limits established in the United States Bureau of Mines,  
58 Report of Investigations 8507, Appendix B - Alternative Blasting

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59 Level Criteria (Figure B-1). The State Fire Marshal may, ~~at his~~  
60 ~~or her sole discretion~~, by rule or formal agreement, delegate to  
61 the applicable municipality or county, the monitoring and  
62 enforcement components of regulations governing the use of  
63 explosives, as recognized in this section, by construction  
64 materials mining activities. Such delegation may include the  
65 assessment and collection of reasonable fees by the municipality  
66 or county for the purpose of carrying out the delegated  
67 activities.

68 (4) The State Fire Marshal shall establish statewide  
69 regulations that require each blasting operation conducted in  
70 connection with construction materials mining activities to use  
71 a seismograph to monitor each blast to ensure compliance with  
72 such regulations. The regulations also must:

73 (a) Require the use of seismographs to conform to the  
74 standards in ISEE Field Practice Guidelines for Blasting  
75 Seismographs (2015);

76 (b) Ensure that, for each blasting operation, a seismograph  
77 is situated at the nearest residence, determined using GPS  
78 technology;

79 (c) Require that, for each vibration record, an electronic  
80 report of the vibration record, along with the raw data from the  
81 seismograph, be made available to the State Fire Marshal in a  
82 manner allowing for the complete analysis of the waveform; and

83 (d) Require that the following are measured and reported  
84 for each blasting operation:

85 1. Frequency and particle velocity, including identifying  
86 the method used for determining the frequency; and

87 2. GPS coordinates of both seismograph locations and blast

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88 locations.

89 (5) Each person permitted by the State Fire Marshal to  
90 engage in construction materials mining activities must submit  
91 written notification of the construction materials mining  
92 activities to the counties and municipalities in which the  
93 construction materials mining activities are to be conducted,  
94 and to any counties or municipalities adjacent to such counties  
95 and municipalities. Any notice required to be given to counties  
96 and municipalities in which construction materials mining  
97 activities are to be conducted also must be given to adjacent  
98 counties and municipalities.

99 (6) The State Fire Marshal shall create a standard form for  
100 the reporting of complaints regarding blasting operations for  
101 construction materials mining activities. Complaint reports must  
102 be submitted to the State Fire Marshal. Each complaint report  
103 must include all of the following:

104 (a) A unique tracking number.

105 (b) The construction materials mining operation that is the  
106 subject of the complaint.

107 (c) The mining activities report for the specific blast  
108 event.

109 (d) The address of the complainant.

110 (e) The date and time the blast occurred.

111 (f) The estimated duration of the blast.

112 (g) A description of what the complainant physically felt.

113 (h) The contact information of the complainant.

114 (i) A brief description of any property damage.

115 (j) Any applicable photographs.

116 (7) The State Fire Marshal shall require training and

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117 continuing education for blasters licensed under s. 552.091 or  
118 seismograph operators who conduct blasting operations in  
119 connection with construction materials mining activities.  
120 Inspectors for the State Fire Marshal who inspect blasting  
121 operations connected with construction materials mining  
122 activities shall attend a blaster training course offered by the  
123 Office of Surface Mining Reclamation and Enforcement of the  
124 United States Department of the Interior.

125 (8) Mining permits issued by the State Fire Marshal for  
126 construction materials mining activities must be issued for a  
127 period of 5 years. The State Fire Marshal shall suspend a mining  
128 permit if three or more violations of the permit occur within a  
129 1-year period. This subsection does not apply to mining permits  
130 issued by the State Fire Marshal before July 1, 2019.

131 (9) The State Fire Marshal shall prepare or contract for  
132 preparation of a report on the feasibility of conducting a  
133 Florida-specific study, comparable to the United States Bureau  
134 of Mines, Report of Investigations 8507, of structural response  
135 to and damage produced by ground vibrations from blasting  
136 operations conducted in connection with construction materials  
137 mining activities in this state. If conducted, such report must  
138 include recommendations as to whether the State Fire Marshal  
139 should conduct or contract for the potential study. The State  
140 Fire Marshal shall submit the report to the Legislature by  
141 January 1, 2020.

142 (a) The report also must:

- 143 1. Recommend the process for conducting the study;
- 144 2. Identify potential locations for test sites;
- 145 3. Address the feasibility of calibrating seismographs to

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146 monitor blasting vibrations with frequencies below 2 hertz;

147 4. Identify methodologies to be used for properly measuring  
148 ground vibration, frequency, impacts to structures, and other  
149 considerations comparable to those in the United States Bureau  
150 of Mines, Report of Investigations 8507; and

151 5. Include cost estimates for such a study.

152 (b) If a study is conducted based on the report from the  
153 State Fire Marshal, the study must include:

154 1. The collection of data from test structures, including  
155 residential structures within blasting areas in this state, to  
156 compare that data with data for control groups that are outside  
157 the blasting areas;

158 2. Analysis of the impacts of ground vibrations on  
159 residents of this state, including physical and psychological  
160 impacts; and

161 3. The determination of seismographic specifications that  
162 apply to this state's unique blast vibration characteristics.

163 Section 2. This act shall take effect July 1, 2019.