

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Procedures for Reporting Releases of Radionuclides at Nuclear Power Plants
- 2) Code Citation: 35 Ill. Adm. Code 1010
- 3)

<u>Section Numbers:</u>	<u>Proposed Actions:</u>
1010.100	Amendment
1010.106	Amendment
1010.108	Amendment
1010.200	Amendment
1010.202	Amendment
1010.204	Amendment
- 4) Statutory Authority: Implementing and authorized by Sections 13.6 and 27 of the Environmental Protection Act [415 ILCS 5/13.6 and 27].
- 5) A Complete Description of the Subjects and Issues Involved: In 2016, the Board began reviewing its rules to identify obsolete, repetitive, confusing, or otherwise unnecessary language. On January 10, 2018, the Illinois Environmental Protection Agency (IEPA) filed a proposal to update provisions including Part 1010. IEPA's proposal arose from Executive Order 2016-13, which required agencies to identify outdated, repetitive, confusing, or unnecessary rules and then amend or repeal them. These proposed amendments to Part 1010 include those submitted by IEPA and those identified separately by the Board. Both IEPA and the Board intend the amendments to be non-substantive clarifications.
- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: No
- 7) Will this rulemaking replace an emergency rule currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? No
- 10) Are there any proposed rulemakings to this Part pending? No
- 11) Statement of Statewide Policy Objectives: This proposed amendment does not create or enlarge a state mandate as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3].

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- 12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comments on this proposal for a period of at least 45 days after the date of publication in the *Illinois Register*. Public comments should refer to Docket R18-28 and be filed electronically through the Clerk's Office On-Line (COOL) on the Board's website at pcb.illinois.gov. Public comments may be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may download copies of the Board's opinions and orders in R18-28 from the Board's Web site at pcb.illinois.gov and may also request copies by calling the Clerk's office at 312-814-3620.

- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small businesses, small municipalities and not for profit corporations affected: None
 - B) Reporting, bookkeeping or other procedures required for compliance: None
 - C) Types of Professional skills necessary for compliance: None
- 14) Small Business Impact Analysis: The Board expects that this rulemaking will not have an adverse impact on small business.
- 15) Regulatory Agenda on which this rulemaking was summarized: January 2022

The full text of the Proposed Amendments begins on the next page:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE I: ATOMIC RADIATION
CHAPTER I: POLLUTION CONTROL BOARD

PART 1010
PROCEDURES FOR REPORTING RELEASES OF
RADIONUCLIDES AT NUCLEAR POWER PLANTS

SUBPART A: GENERAL PROVISIONS

11	Section	
12	1010.100	Purpose
13	1010.102	Applicability
14	1010.104	Scope
15	1010.106	Definitions
16	1010.108	Severability

SUBPART B: REPORTING

20	1010.200	Evaluation of Releases
21	1010.202	Reporting of Releases
22	1010.204	Follow-up Written Report

AUTHORITY: Implementing and authorized by Sections 13.6 and 27 of the Environmental Protection Act [415 ILCS 5/13.6 and 27].

SOURCE: Adopted at 32 Ill. Reg. 7789, effective May 2, 2008; amended in R18-28 at 46 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 1010.100 Purpose

This Part prescribes standards for detecting and reporting unpermitted releases of radionuclides from nuclear power plants under Section 13.6 of the Illinois Environmental Protection Act [415 ILCS 5/13.6].

(Source: Amended at 46 Ill. Reg. _____, effective _____)

Section 1010.106 Definitions

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part will be the same as that applied to the same words or terms in the Illinois Environmental Protection Act [415 ILCS 5].

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"Act" means the Illinois Environmental Protection Act [415 ILCS 5].

"Agency" means the Illinois Environmental Protection Agency.

"Curie" or "Ci" means the quantity of radioactive material producing 37 billion nuclear transformations per second.

"Groundwater" means underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure. [415 ILCS 5/3.210]

"IEMA" means the Illinois Emergency Management Agency.

"L" means liter.

"Licensee" means the holder of a license issued for a nuclear power plant under chapter I of title 10 of the Code of Federal Regulations.

"Licensee controlled area" means the land or property that is owned, leased, or otherwise controlled by the licensee.

"Picocurie" or "pCi" means the quantity of radioactive material producing 2.22 nuclear transformations per minute. One pCi is one trillionth (10^{-12}) of one curie.

"Person" is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, State agency, or any other legal entity, or their legal representative, agent, or assigns. [415 ILCS 5/3.315]

"Station generated liquids" means liquids used in, or as a part of, the power generation process at a nuclear power plant and that contain, or potentially could contain, radionuclides.

"Surface water" means all water that is open to the atmosphere and subject to surface runoff.

"Unpermitted release of a radionuclide" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of a radionuclide into groundwater, surface water, or soil that is not permitted under State or federal law or regulation. [415 ILCS 5/13.6(c)]. "Unpermitted release of a radionuclide" does not include the discharge of a radionuclide from a point source at a designated process water or cooling water outfall identified in the nuclear power plant's National Pollutant Discharge Elimination System permit, if the discharge is

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89 authorized in the nuclear power plant's United States Nuclear Regulatory
90 Commission operating license.

91
92 (Source: Amended at 46 Ill. Reg. _____, effective _____)
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Section 1010.108 Severability

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96 If any provision in this Part or its application to any person or under any circumstances is
97 adjudged invalid, the adjudication will not affect the validity of this Part as a whole or of any
98 portion not adjudged invalid.

99
100 (Source: Amended at 46 Ill. Reg. _____, effective _____)
101

SUBPART B: REPORTING

Section 1010.200 Evaluation of Releases

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106 Within 24 hours after an unpermitted release of a radionuclide from a nuclear power plant into
107 groundwater, surface water, or soil, the licensee must evaluate the release in compliance with
108 this Section to determine whether it must be reported. The evaluation must be based on the
109 volumes of station generated liquids and concentrations or quantities of radionuclides released,
110 not on the volumes of station generated liquids and concentrations or quantities of radionuclides
111 remaining after the initiation or completion of response actions. The licensee must report the
112 release in compliance with Section 1010.202 if unpermitted release of station generated liquids:

113
114 a) result in tritium concentrations of 200 pCi/L or more outside of the licensee
115 controlled area.

116
117 b) contain tritium at quantities of 0.002 curies or more.

118
119 (Source: Amended at 46 Ill. Reg. _____, effective _____)
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Section 1010.202 Reporting of Releases

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123 a) Reporting required under Section 1010.200 must be done within 24 hours after
124 the release to both the Agency and IEMA in compliance with the following:

125
126 1) Reports to the Agency must be given by telephone and electronically. The
127 Agency's telephone number for reporting environmental emergencies is 1-
128 217-782-3637.

129
130 2) Reports to IEMA must be given by telephone and electronically. IEMA's
131 telephone number for reporting emergencies is 1-800-782-7860, or, if
132 calling from outside Illinois, 1-217-782-7860.

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- 3) Electronic reports must be submitted on forms and in a format prescribed by the Agency, and must be submitted to addresses prescribed by the Agency and IEMA. The Agency must consult with IEMA in developing the forms and format for electronic reports required under this Section.
 - b) Reporting under Section 1010.200 must include the following information using the best data available at the time of the report:
 - 1) The name and address of the nuclear power plant where the release occurred;
 - 2) The name, signature, and telephone number of the Principal Executive Officer for the nuclear power plant or the Principal Executive Officer's authorized agent;
 - 3) The specific location of the release;
 - 4) The time and duration of the release;
 - 5) An estimate of the volume and radionuclide concentrations (in pCi/L) of station generated liquids released, and an estimate of the flow rate if the release is ongoing;
 - 6) Identification of the radionuclides released and an estimate of the quantities released (in curies);
 - 7) Whether the release was to groundwater, surface water, or soil, and a description of the area into which the release occurred (e.g., field, ditch, stream, or other description) and the size of the area affected;
 - 8) The actions taken to respond to, contain, and mitigate the release;
 - 9) The known and anticipated impacts to human health and the environment, including groundwater and surface water resources, due to the release;
 - 10) The names, addresses, and telephone numbers of persons at the nuclear power plant who may be contacted for further information regarding the release; and
 - 11) The name and mailing address of the licensee of the nuclear power plant.
 - c) The Agency must post copies of the electronic reports it receives under this Section on the Agency's website.

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(Source: Amended at 46 Ill. Reg. _____, effective _____)

Section 1010.204 Follow-up Written Report

A licensee who reports a release under this Part must provide to the Agency and to IEMA a follow-up written report of the release within five business days after reporting the release.

- a) The follow-up report must confirm and update the information provided by the licensee under Section 1010.202 utilizing the best data available and must also include the following information:
 - 1) Copies of all lab analyses used to confirm the presence of, or conducted in response to, the release if lab analyses have been conducted;
 - 2) Plan view and, if available, geological cross-section maps showing the location of the release, the locations of samples taken to confirm the release if samples have been taken, the locations of samples taken in response to the release if samples have been taken, the measured and modeled extents of the release if known, the groundwater flow direction if known, groundwater contours if known, the boundary of the licensee controlled area, and structures, roads, and other surface features;
 - 3) An estimate of the volume and radionuclide concentrations (in pCi/L) of station generated liquids released but not recovered;
 - 4) An estimate of the quantities (in curies) of radionuclides released but not recovered;
 - 5) An updated description of activities taken in response to the release;
 - 6) If additional activities in response to the release are planned, a description of those activities; and
 - 7) The name and signature of the Principal Executive Officer for the nuclear power plant or the Principal Executive Officer's authorized agent.
- b) The follow-up report must be submitted electronically on forms and in a format prescribed by the Agency and must be submitted to addresses prescribed by the Agency and IEMA. Within five business days after submission of the electronic follow-up report, hard copies of the follow-up report must be submitted to the Agency and IEMA at the following addresses:

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221 Bureau of Water
222 Groundwater Section
223 1021 North Grand Avenue East
224 P.O. Box 19276
225 Springfield, IL 62794-9276
226

227 Illinois Emergency Management Agency
228 Division of Nuclear Safety
229 Bureau of Environmental Safety
230 1035 Outer Park Drive
231 Springfield, IL 62704
232

- 233 c) The Agency must consult with IEMA in developing the forms and format for
234 reports required under this Section.
235
- 236 d) The Agency must post copies of the follow-up reports it receives under this
237 Section on the Agency's website.
238

239 (Source: Amended at 46 Ill. Reg. _____, effective _____)



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0 TITLE 35: ENVIRONMENTAL PROTECTION
1 SUBTITLE I: ATOMIC RADIATION
2 CHAPTER I: POLLUTION CONTROL BOARD

3
4 PART 1010
5 PROCEDURES FOR REPORTING RELEASES OF
6 RADIONUCLIDES AT NUCLEAR POWER PLANTS

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8 SUBPART A: GENERAL PROVISIONS
9

10Section

- 111010.100 Purpose
- 121010.102 Applicability
- 131010.104 Scope
- 141010.106 Definitions
- 151010.108 Severability

16

17 SUBPART B: REPORTING

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- 191010.200 Evaluation of Releases
- 201010.202 Reporting of Releases
- 211010.204 Follow-up Written Report

22

23AUTHORITY: Implementing and authorized by Sections 13.6 and 27 of the Environmental
24Protection Act [415 ILCS 5/13.6 and 27].

25

26SOURCE: Adopted at 32 Ill. Reg. 7789, effective May 2, 2008; amended in R18-28 at 46 Ill.

27Reg. , effective .

28

29 SUBPART A: GENERAL PROVISIONS

30

31Section 1010.100 Purpose

32

33This Part prescribes standards for detecting and reporting unpermitted releases of radionuclides
34from nuclear power plants under ~~pursuant to~~ Section 13.6 of the Illinois Environmental
35Protection Act [415 ILCS 5/13.6].

36

37 (Source: Amended at 46 Ill. Reg. , effective)

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38

39 **Section 1010.106 Definitions**

40

41 Except as stated in this Section, or unless a different meaning of a word or term is clear from the
42 context, the definition of words or terms in this Part ~~will~~shallwill be the same as that applied to
43 the same words or terms in the Illinois Environmental Protection Act [415 ILCS 5].

44

"Act" means the Illinois Environmental Protection Act [415 ILCS 5].

46

"Agency" means the Illinois Environmental Protection Agency.

48

"Curie" or "Ci" means the quantity of radioactive material producing 37 billion
50 nuclear transformations per second.

51

*"Groundwater" means underground water which ~~that~~ occurs within the saturated
52 zone and geologic materials where the fluid pressure in the pore space is equal to
53 or greater than atmospheric pressure. [415 ILCS ~~5/3.2103-64~~5/3.210]*

55

"IEMA" means the Illinois Emergency Management Agency.

57

"L" means liter.

59

"Licensee" means the holder of a license issued for a nuclear power plant under
61 chapter I of title 10 of the Code of Federal Regulations.

62

"Licensee controlled area" means the land or property that is owned, leased, or
64 otherwise controlled by the licensee.

65

"Picocurie" or "pCi" means the quantity of radioactive material producing 2.22
67 nuclear transformations per minute. One pCi is one trillionth (10^{-12}) of one curie.

68

*"Person" is any individual, partnership, co-partnership, firm, company, limited
69 liability company, corporation, association, joint stock company, trust, estate,
70 political subdivision, State agency, or any other legal entity, or their legal
71 representative, agent, or assigns. [415 ILCS 5/3.315]*

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74 "Station generated liquids" means liquids used in, or as a part of, the power
75 generation process at a nuclear power plant and that contain, or potentially could
76 contain, radionuclides.

77
78 "Surface water" means all water that is open to the atmosphere and subject to
79 surface runoff.

80
81 *"Unpermitted release of a radionuclide" means any spilling, leaking, emitting,*
82 *discharging, escaping, leaching, or disposing of a radionuclide into groundwater,*
83 *surface water, or soil that is not permitted under State or federal law or*
84 *regulation. [415 ILCS 5/13.6(c)]. "Unpermitted release of a radionuclide" does*
85 *not include the discharge of a radionuclide from a point source at a designated*
86 *process water or cooling water outfall identified in the nuclear power plant's*
87 *National Pollutant Discharge Elimination System permit, ~~if provided~~ if*
88 *the discharge is authorized in the nuclear power plant's United States Nuclear*
89 *Regulatory Commission operating license.*

90
91 (Source: Amended at 46 Ill. Reg. _____, effective _____)

92
93 **Section 1010.108 Severability**

94
95 If any provision in this Part or its application to any person or under any circumstances is
96 adjudged invalid, ~~the~~ such the adjudication ~~will~~ shall will not affect the validity of this Part as a
97 whole or of any portion not adjudged invalid.

98
99 (Source: Amended at 46 Ill. Reg. ~~—~~ _____, effective _____)

100
101 **SUBPART B: REPORTING**

102
103 **Section 1010.200 Evaluation of Releases**

104
105 Within 24 hours after an unpermitted release of a radionuclide from a nuclear power plant into
106 groundwater, surface water, or soil, the licensee must evaluate the release in
107 ~~compliance~~ accordance compliance with this Section to determine whether it must be reported.
108 The evaluation ~~cannot take into account remedial actions taken in response to the release (i.e.,~~
109 ~~the evaluation~~ must be based on the volumes of station generated liquids and concentrations or
110 quantities of radionuclides released, not on the volumes of station generated liquids and
111 concentrations or quantities of radionuclides remaining after the initiation or completion of

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112 response actions). ~~The~~If the release is required to be reported, theThe licensee must report the
113 release in ~~compliance~~accordance~~compliance~~ with Section 1010.202 if ~~unpermitted releases of~~
114 ~~station generated liquids of this Part.~~

115 a) ~~Licensees must report~~ unpermitted ~~releases~~release of station generated liquids ~~that~~ :

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117 a) result in tritium concentrations of 200 pCi/L or more outside of the licensee
118 controlled area.

119

120 b) ~~Licensees must report unpermitted releases of station generated liquids that~~
121 contain tritium at quantities of 0.002 ~~Curies~~curies or more.

122

123 (Source: Amended at 46 Ill. Reg. ~~—~~ _____, effective _____)

124

125 **Section 1010.202 Reporting of Releases**

126

127 a) ~~Reporting~~ReportsReporting required under Section 1010.200 must be
128 ~~done~~givendone within 24 hours after the release to both the Agency and IEMA in
129 ~~compliance~~accordance~~compliance~~ with the following:

130

131 1) Reports to the Agency must be given by telephone and electronically. The
132 Agency's telephone number for reporting environmental emergencies is
133 1-217-782-3637.

134

135 2) Reports to IEMA must be given by telephone and electronically. IEMA's
136 telephone number for reporting emergencies is 1-800-782-7860, or, if
137 calling from outside Illinois, 1-217-782-7860.

138

139 3) Electronic reports must be submitted on forms and in a format prescribed
140 by the Agency, and must be submitted to addresses prescribed by the
141 Agency and IEMA. The Agency ~~must~~shallmust consult with IEMA in
142 developing the forms and format for electronic reports required under this
143 Section.

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145 b) ~~Reporting~~Reports requiredReporting under Section 1010.200 must include, ~~at a~~
146 ~~minimum~~, the following information using the best data available at the time of
147 the report:

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188 **Section 1010.204 Follow-up Written Report**

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190A ~~licensee~~An owner or operator~~licensee~~ who reports a release under this Part must provide to the
191 Agency and to IEMA a follow-up written report of the release within five business days after
192 reporting the release.

193

194 a) The follow-up report must confirm and update the information provided by the
195 licensee under Section 1010.202 utilizing the best data available and must also
196 include the following information:

197

198 1) Copies of all lab analyses used to confirm the presence of, or conducted in
199 response to, the release if lab analyses have been conducted;

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201 2) Plan view and, if available, geological cross-section maps showing, ~~at a~~
202 ~~minimum~~, the location of the release, the locations of samples taken to
203 confirm the release if samples have been taken, the locations of samples
204 taken in response to the release if samples have been taken, the measured
205 and modeled extents of the release if known, the groundwater flow
206 direction if known, groundwater contours if known, the boundary of the
207 licensee controlled area, and structures, roads, and other surface features;

208

209 3) An estimate of the volume and radionuclide concentrations (in pCi/L) of
210 station generated liquids released but not recovered;

211

212 4) An estimate of the quantities (in ~~Curies~~curies) of radionuclides released
213 but not recovered;

214

215 5) An updated description of activities taken in response to the release;

216

217 6) If additional activities in response to the release are planned, a description
218 of those activities; and

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220 7) The name and signature of the Principal Executive Officer for the nuclear
221 power plant or the Principal Executive Officer's authorized agent.
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224 b) The follow-up report must be submitted electronically on forms and in a format
225 prescribed by the Agency and must be submitted to addresses prescribed by the
226 Agency and IEMA. Within five business days after submission of the electronic
227 follow-up report, hard copies of the follow-up report must be submitted to the
228 Agency and IEMA at the following addresses:

229
230 Illinois Environmental Protection Agency
231 Bureau of Water
232 Groundwater Section
233 1021 North Grand Avenue East
234 P.O. Box 19276
235 Springfield, Ill 62794-9276

236
237 Illinois Emergency Management Agency
238 Division of Nuclear Safety
239 Bureau of Environmental Safety
240 1035 Outer Park Drive
241 Springfield, Ill 62704

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243 c) The Agency ~~must shall~~ must consult with IEMA in developing the forms and
244 format for reports required under this Section.

245
246 ed) The Agency must post copies of the follow-up reports it receives under this
247 Section on the Agency's website.

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250 (Source: Amended at 46 Ill. Reg. ~~---~~ _____, effective _____)

Document comparison by Workshare Compare on Wednesday, May 4, 2022
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Document 2 ID	file:///I:\Input\Agency Rulemakings - Files Received\2022\Volume 46, Issue 19\35-1010-JCAR r01.docx
Description	35-1010-JCAR r01
Rendering set	Standard

Legend:	
<u>Insertion</u>	
Deletion	
Moved from	
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Style change	
Format change	
Moved deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
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Deletions	44
Moved from	0
Moved to	0
Style changes	0
Format changes	0

Total changes	77
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