Owner / Applicant Information

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Designer Information

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Project Information

Lebanon Plant 1 (LP1) Building LP116
1400 W 375 N

LEBANON IN 46052

County BOONE

Project Type New [Y] Addition [ ] Alteration [ ] Existing [ ] Change of Occupancy [ ]

Project Status [F] F=Filed U or Null=Unfiled

IDHS Issued Correction order? [No] Has Violation been Issued? [No]

Violation Issued by: NA

Local Building Official
Phone: [7654828832] Email: [dwarren@cityoflebanon.org]

Local Fire Official
Phone: [7654828832] Email: [jhendricks@lebanon.in.gov]

Variance Details

Code Name: 2009 Indiana Electrical Code (675 IAC 17-1.8)

700.12(B)(3)

Conditions: The emergency generator providing backup power for ventilation and alarm systems in the event of loss of normal power for ventilation system and alarm systems serving H-2 and H-3 areas in Building 16, Peptide 2 will be supplied by natural gas in lieu of an on-site fuel supply. Sec. 5004.7, IFC requires standby or emergency power for ventilation and alarm systems in areas classified as H-2 and H-3 Occupancies.

The Peptide 2 Synthesis/Purification manufacturing building will include four (4) full floor levels, along with two (2) interstitial partial levels. The building will include F-1, H-3, H-2, B, and S-1 Occupancies, and will be of Type IA Construction.

DEMONSTRATION THAT PUBLIC HEALTH, SAFETY, AND WELFARE ARE PROTECTED:

1=Non-compliance with the rule will not be adverse to the public health, safety or w

[2]

2= Applicant will undertake alternative actions in lieu of compliance with the rule to ensure that granting of the variance will not be adverse to public health, safety, or welfare. Explain why alternative actions would be adequate (be specific).

Facts: 1. The exception to this section in the NEC states that where acceptable to the authority having jurisdiction, the use of other than on-site fuels shall be permitted where there is a low probability of a simultaneous failure of both the off-site fuel delivery system and power from the outside electrical utility company.
2. The natural gas supply and electrical utility sources are separate sources and unlikely to fail simultaneously - no more so than an on-site fuel supply and electric utility simultaneously.3. The building will be protected throughout with an automatic sprinkler system per IBC/IFC, NFPA 13, and FM Global standards.

4. On site safety and fire protection features include the Lilly Lebanon Fire Rescue Department with on-site fire station, a site security operations center staffed 24/7, on-site fire protection water supply consisting of two (2) 540,000-gallon above-ground tanks, two (2) 4,000 gpm fire pumps, and a 16-inch fire loop around the site.

5. This variance has been approved previously for three (3) other buildings on this site with H Occupancy classification; 24-10-35, 24-10-36, and 24-10-58.

DEMONSTRATION OF UNDUE HARDSHIP OR HISTORICALLY SIGNIFICANT STRUCTURE:

[ ] Imposition of the rule would result in an undue hardship (unusual difficulty) because of physical limitations of the construction site or its utility services.

[Y] Imposition of the rule would result in an undue hardship (unusual difficulty) because of major operational problems in the use of the building or structure.

[ ] Imposition of the rule would result in an undue hardship (unusual difficulty) because of excessive costs of additional or altered construction elements.

[ ] Imposition of the rule would prevent the preservation of an architecturally or a historically significant part of the building or structure

Facts: Natural gas generators require less maintenance and are considered more reliable in this case than on-site propane or diesel tanks and piping, and additionally have less environmental impacts.

Variance Details

Code Name: Other Code (Not in the list provided)

5004.3.1, 2014 IFC

Conditions: The design for the ventilation system for H-2 and H-3 areas in Building 11, Peptide 2 will involve re-circulation of air. Based upon process use areas classified as H-2 and H-3

involve re-circulation of air. Based upon process use areas classified as H-2 and H-3 Occupancies, the code requires continuous ventilation and prohibits re-circulation of air within the building unless alternate designs are approved.

The Peptide 2 Synthesis/Purification manufacturing building will include four (4) full floor levels, along with two (2) interstitial partial levels. The building will include F-1, H-3, H-2, B, and S-1 Occupancies, and will be of Type IA Construction.

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Facts:

1. The process areas involving hazardous materials will be provided with an alternate design mechanical ventilation system to maintain flammable liquid vapor accumulation to less than 25% of LEL (lower explosive limit). LEL detectors will be provided to automatically stop recirculation of air and activate once through, minimum 100% outside air purge mode of ventilation to continue to maintain vapor accumulation to less than 25% of LEL.
2. The design of the ventilation system with respect to LEL detection activation of the system will comport with the provisions of Sec. 18.6.3.1, NFPA 30, Flammable and Combustible Liquids Code, for process areas using Class I flammable liquids. NFPA 30 recognizes a performance based design where LEL detectors are utilized to initiate 100% exhaust for a hazardous exhaust system. Sensors are provided for leak detection, liquid leak detection, and atmospheric leak detection.3. The exhaust system will provide an exhaust rate equal to, or in excess of the code minimum of 1 cfm per sq ft per the IFC, as well as the minimum 6 air changes required per Lilly.

4. Similar variances have been approved previously for other Lilly facilities, including 26-04-16b, 26-04-18, 26-04-17b, 26-04-21, 24-12-04a, 24-12-97, 24-12-03a, 22-12-57a, 22-09-32a, 21-10-30a, 19-10-34a, 16-03-33, 16-03-31 and 06-12-42.

5. The building will be protected throughout with an automatic sprinkler system per IBC/IFC, NFPA 13, and FM Global standards.

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Facts: The hardship is the need to maintain critical operational conditions in process areas, as well as the operational and maintenance cost to temper 100% outside makeup air for the ventilation system.

Variance Details

Code Name: Other Code (Not in the list provided)

1008.1.2, 2014 IBC

Conditions: A fire curtain complying with UL 10D will be provided to protect an opening in the 2-hour wall separating the Purification AFD Suite on Level 1.5, including use as a means of egress door. The currently adopted 2012 edition of the IBC does not recognize opening protection per UL 10D, with use as a means of egress.

The Peptide 2 Synthesis/Purification manufacturing building will include four (4) full floor levels, along with two (2) interstitial partial levels. The building will include F-1, H-3, H-2, B, and S-1 Occupancies, and will be of Type IA Construction.

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Facts: 1. The 2021 and 2024 IBC recognizes the use of a UL 10D fire curtain, including use in the means of egress per Sec. 1010.3.3, 2024 IBC.

2. The building will be protected throughout with an automatic sprinkler system per NFPA 13 and FM Global requirements.

3. Based upon compliance with UL 10D per the 2021 and 2024 editions of the IBC, the use of the proposed opening protection will not be adverse to safety.

4. Previous variances have been granted to permit the use of UL 10D fire curtains used for egress, including 25-11-02c, 25-02-07, and 25-02-08.

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Facts: The use of the proposed overhead coiling fire curtain is necessary based upon limited available space in the location indicated.

Variance Details

Code Name: Other Code (Not in the list provided)

2902.3.2, 2014 IBC

Conditions: Available toilet facilities for Mechanical Level 4 will be located on Level 1. Code requires facilities to be located one level above or below an occupied floor level.

The Peptide 2 Synthesis/Purification manufacturing building will include four (4) full floor levels, along with two (2) interstitial partial levels. The building will include F-1, H-3, H-2, B, and S-1 Occupancies, and will be of Type IA Construction.

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Facts:

1. Level 4 is a mechanical level and is not normally occupied. There are no permanent work stations on this level, and it will be occupied only infrequently for maintenance of equipment. The primary work area for maintenance personnel is in the 1st floor area where the toilet facility will be provided for their use.
2. The toilet facility will be a maximum of approximately 893 feet travel distance from the most remote point on Level 4 - code permits up to 1,000 feet for an industrial use.3. Based upon compliance with the overall travel distance limit to the toilet facility, and the lack of permanent work stations on Level 4, the location of the available toilet facility on the 1st floor will not be adverse to health or welfare.

4. Similar variances were approved previously for two (2) other buildings on this site - 24-09-56 and 24-09-57.

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Facts:

Location of toilet facilities on Level 4 poses a risk for pest control, and also introduces risk for use by other employees in the GMP areas on levels below, where strict GMP gowning protocols are maintained.

Variance Details

Code Name: Other Code (Not in the list provided)

716.5, 2014 IBC

Conditions:

A fire curtain complying with UL 10D will be provided to protect an opening in the 2-hour wall separating the Purification AFD Suite on Level 1.5, including use as a means of egress door. The currently adopted 2012 edition of the IBC does not recognize opening protection per UL 10D.

The Peptide 2 Synthesis/Purification manufacturing building will include four (4) full floor levels, along with two (2) interstitial partial levels. The building will include F-1, H-3, H-2, B, and S-1 Occupancies, and will be of Type IA Construction.

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Facts:

1. Sec. 716.4, of the 2021 and 2024 IBC recognizes the use of the proposed product complying with UL 10D. See attached excerpt from the Significant Changes in the 2021 IBC publication for more information.

2. The building will be protected throughout with an automatic sprinkler system per NFPA 13 and FM Global requirements.

3. Based upon compliance with UL 10D per the 2021 and 2024 editions of the IBC, the use of the proposed opening protection will not be adverse to safety.

4. Previous variances have been granted to permit the use of UL 10D fire curtains for opening protection in rated walls, including 25-11-02c, 25-02-07, and 25-02-08.

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Facts:

The use of the proposed overhead coiling fire curtain is necessary based upon limited available space in the location indicated.