



COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Merlin Klotz
Douglas County Clerk & Recorder
301 Wilcox St
Castle Rock, CO 80104

February 10, 2015

Dear Sir or Madam:

On February 11, 2015, the Air Pollution Control Division will begin a 30-day public notice period for Children's Hospital Colorado - South Campus. A copy of this public notice and the public comment packet are enclosed.

Thank you for assisting the Division by posting a copy of this public comment packet in your office. Public copies of these documents are required by Colorado Air Quality Control Commission regulations. The packet must be available for public inspection for a period of thirty (30) days from the beginning of the public notice period. Please send any comment regarding this public notice to the address below.

Colorado Dept. of Public Health & Environment
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Attention: Clara Gonzales

Regards,

Clara Gonzales
Public Notice Coordinator
Stationary Sources Program
Air Pollution Control Division

Enclosure





Air Pollution Control Division

Notice of a Proposed Project or Activity Warranting Public Comment

Website Title: Children's Hospital Colorado - South Campus - Douglas County

Notice Period Begins: February 11, 2015

Notice is hereby given that an application for a proposed project or activity has been submitted to the Colorado Air Pollution Control Division for the following source of air pollution:

Applicant: Children's Hospital Colorado

Facility: South Campus
Hospital

1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County, Colorado
Douglas County

The proposed project or activity is as follows: The Applicant proposes to construct five (5) new boilers and two (2) new emergency generators

The Division has determined that this permitting action is subject to public comment per Colorado Regulation No. 3, Part B, Section III.C due to the following reason(s):

- permitted emissions exceed public notice threshold values in Regulation No. 3, Part B, Section III.C.1.a (25 tpy in a non-attainment area)

The Division has made a preliminary determination of approval of the application.

A copy each of the application, the Division's analysis, and a draft of Construction Permit, 14DG1035, has been filed with the Douglas County Clerk's office. A copy of the draft permit and the Division's analysis are available on the Division's website at <https://www.colorado.gov/pacific/cdphe/air-permit-public-notices>

The Division hereby solicits submission of public comment from any interested person concerning the ability of the proposed project or activity to comply with the applicable standards and regulations of the Commission. The Division will receive and consider written public comments for thirty calendar days after the date of this Notice. Any such comment must be submitted in writing to the following addressee:

Sunday A. Fadeyi, P.E.
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South, APCD-SS-B1
Denver, Colorado 80246-1530
cdphe.commentsapcd@state.co.us

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: 14DG1035

ISSUANCE 1

DATE ISSUED:

ISSUED TO: Children's Hospital Colorado

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Hospital facility, known as South Campus, located at 1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County Colorado

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO-SB-1	001	One (1) Fulton, natural gas and distillate oil fired boiler, model: VMP-130, SN: F1015552A distillate oil and natural gas fuel-fired boiler rated at 5.35 MMBtu per hour.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST** notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit **by submitting a Notice of Startup (NOS) form to the Division**. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notice>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

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4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number and/or AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO-SB-1	001					3.4	5.7		Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit - both fuels combined
SO-SB-1	001	Fuel Consumption	46,870 MMBtu per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2. RACT for this source was determined to be no control due to the high cost per ton of emission removed.

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OPERATING & MAINTENANCE REQUIREMENTS

11. This source is not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

12. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

Periodic Testing Requirements

13. Periodic testing is not required for this source.

ADDITIONAL REQUIREMENTS

14. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
15. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

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- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 16. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 17. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 18. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____ By: _____
Sunday Fadeyi, P.E. R K Hancock III, P.E.
Permit Engineer Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Children's Hospital Colorado

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.

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- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-reg>.
- 3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate (lb/yr)
001	Hexane	110-54-3	84

- 4) The emission levels contained in this permit are based on the following emission factors:

Point 001: Fuels Consumption

CAS	Pollutant	Emission Factors Applied		Source
		lbs/MMBtu - natural gas	lbs/MMBtu- diesel fuel	
	NO _x	0.100	0.144	AP-42 Tables 1.4-1 & 2
	VOC	0.006	0.245	AP-42 Tables 1.4-1 & 2

- 5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.
- 6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NO _x , VOC
Major NANSR	Minor: NO _x , VOC

- 7) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)
- 8) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 9) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and

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upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

- 10) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 11) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: 14DG1036

ISSUANCE 1

DATE ISSUED:

ISSUED TO: Children's Hospital Colorado

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Hospital facility located at 1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County Colorado

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO-SB-2	002	One (1) Fulton, natural gas and distillate oil fired boiler, model: VMP-130, SN: F1015674A distillate oil and natural gas fuel-fired boiler rated at 5.35 MMBtu per hour.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST** notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit **by submitting a Notice of Startup (NOS) form to the Division**. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notice>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

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ISSUANCE 1

4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number and/or AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO-SB-2	001					3.4	5.7		Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit - both fuels combined
SO-SB-2	001	Fuels Consumption	46,870 MMBtu per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2. RACT for this source was determined to be no control due to the high cost per ton of emission removed.

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OPERATING & MAINTENANCE REQUIREMENTS

11. This source is not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

12. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

Periodic Testing Requirements

13. Periodic testing is not required for this source.

ADDITIONAL REQUIREMENTS

14. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
15. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

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- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 16. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 17. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 18. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____
Sunday Fadeyi, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Children's Hospital Colorado

Children's Hospital Colorado
Permit No. 14DG1036
ISSUANCE 1

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.
- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.

- 3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate (lb/yr)
002	Hexane	110-54-3	84

- 4) The emission levels contained in this permit are based on the following emission factors:

Point 002: Fuels Consumption

- 5)

CAS	Pollutant	Emission Factors Applied		Source
		lbs/MMBtu - natural gas	lbs/MMBtu- diesel fuel	
	NO _x	0.100	0.144	AP-42 Tables 1.4-1 & 2
	VOC	0.006	0.245	AP-42 Tables 1.4-1 & 2

- 6)
- 7) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

- 8) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NO _x , VOC
Major NANSR	Minor: NO _x , VOC

- 9) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit

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(Reference: Regulation No. 3, Part A, Section VI.B.)

- 10) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 11) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
- 12) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 13) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: 14DG1037

ISSUANCE 1

DATE ISSUED:

ISSUED TO: Children's Hospital Colorado

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Hospital facility located at 1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County Colorado

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO_HWB_1	003	One (1) Fulton, natural gas and distillate oil fired boiler, model: VTG6000, SN: 8011, rated at 6.00 MMBtu per hour.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST** notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit **by submitting a Notice of Startup (NOS) form to the Division**. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notice>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

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4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number and/or AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO_HWB_1	003					3.8	6.4		Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit - both fuels combined
SO_HWB_1	003	Fuels Consumption	52,560 MMBtu per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2. RACT for this source was determined to be no control due to the high cost per ton of emission removed.

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OPERATING & MAINTENANCE REQUIREMENTS

11. This source is not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

12. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

Periodic Testing Requirements

13. Periodic testing is not required for this source.

ADDITIONAL REQUIREMENTS

14. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
15. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

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- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 16. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 17. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 18. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____ By: _____
 Sunday Fadeyi, P.E. R K Hancock III, P.E.
 Permit Engineer Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Children's Hospital Colorado

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.

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- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.
- 3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate (lb/yr)
003	Hexane	110-54-3	95

- 4) The emission levels contained in this permit are based on the following emission factors:

Point 003: Fuels Consumption

CAS	Pollutant	Emission Factors Applied		Source
		lbs/MMBtu - natural gas	lbs/MMBtu- diesel fuel	
	NO _x	0.100	0.144	AP-42 Tables 1.4-1 & 2
	VOC	0.006	0.245	AP-42 Tables 1.4-1 & 2

- 5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.
- 6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NO _x , VOC
Major NANSR	Minor: NO _x , VOC

- 7) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)
- 8) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 9) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and

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upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

- 10) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 11) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: 14DG1038

ISSUANCE 1

DATE ISSUED:

ISSUED TO: Children's Hospital Colorado

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Hospital facility located at 1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County Colorado

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO_HWD_2	004	One (1) Fulton, natural gas and distillate oil fired boiler, model: VTG6000, SN: 8009, rated at 6.00 MMBtu per hour.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST** notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit **by submitting a Notice of Startup (NOS) form to the Division**. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notice>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

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4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number and/or AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO_HWD_2	004					3.8	6.4		Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit - both fuels combined
SO_HWD_2	004	Fuels Consumption	52,560 MMBtu per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2. RACT for this source was determined to be no control due to the high cost per ton of emission removed.

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OPERATING & MAINTENANCE REQUIREMENTS

11. This source is not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

12. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

Periodic Testing Requirements

13. Periodic testing is not required for this source.

ADDITIONAL REQUIREMENTS

14. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
15. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.


- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

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- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 16. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 17. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 18. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: 

Sunday Fadeyi, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Children's Hospital Colorado

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.

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Air Pollution Control Division

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2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-reg>.

3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate (lb/yr)
004	Hexane	110-54-3	95

4) The emission levels contained in this permit are based on the following emission factors:

Point 004: Fuels Consumption

CAS	Pollutant	Emission Factors Applied		Source
		lbs/MMBtu - natural gas	lbs/MMBtu- diesel fuel	
	NO _x	0.100	0.144	AP-42 Tables 1.4-1 & 2
	VOC	0.006	0.245	AP-42 Tables 1.4-1 & 2

5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NO _x , VOC
Major NANSR	Minor: NO _x , VOC

7) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)

8) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

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- 9) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
- 10) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 11) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: **14DG1039**

ISSUANCE 1

DATE ISSUED:

ISSUED TO: Children's Hospital Colorado

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Hospital facility located at 1811 Plaza Drive, Highlands Ranch, Colorado, Douglas County Colorado

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO_HWB_3	005	One (1) Fulton, natural gas and distillate oil fired boiler, model: VTG6000, SN: 8008, rated at 6.00 MMBtu per hour.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. **YOU MUST notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit by submitting a Notice of Startup (NOS) form to the Division.** The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notices>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

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4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number and/or AIRS ID number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

6. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO_HWB_3	005					3.8	6.4		Point

See "Notes to Permit Holder #4" for information on emission factors and methods used to calculate limits.

PROCESS LIMITATIONS AND RECORDS

7. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit - both fuels combined
SO_HWB_3	005	Fuels Consumption	52,560 MMBtu per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

8. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity shall be determined using EPA Method 9. (Reference: Regulation No. 1, Section II.A.1. & 4.)
9. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
10. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2. RACT for this source was determined to be no control due to the high cost per ton of emission removed.

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OPERATING & MAINTENANCE REQUIREMENTS

11. This source is not required to follow a Division-approved operating and maintenance plan. The operating and maintenance plan provided by the manufacturer shall be followed for this source.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

12. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

Periodic Testing Requirements

13. Periodic testing is not required for this source.

ADDITIONAL REQUIREMENTS

14. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
15. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

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- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 16. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 17. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 18. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____
Sunday Fadeyi, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This Issuance	Issued to Children's Hospital Colorado

Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.

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- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.
- 3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate (lb/yr)
005	Hexane	110-54-3	95

- 4) The emission levels contained in this permit are based on the following emission factors:

Point 005: Fuels Consumption

CAS	Pollutant	Emission Factors Applied		Source
		lbs/MMBtu - natural gas	lbs/MMBtu- diesel fuel	
	NO _x	0.100	0.144	AP-42 Tables 1.4-1 & 2
	VOC	0.006	0.245	AP-42 Tables 1.4-1 & 2

- 5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.
- 6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NO _x , VOC
Major NANSR	Minor: NO _x , VOC

- 7) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)
- 8) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

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- 9) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
- 10) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 11) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: **14DG1040**

ISSUANCE 1

DATE ISSUED:

ISSUED TO: **Children's Hospital Colorado**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Healthcare, located at 1811 Plaza Drive, SO200, Highland Ranch in Douglas County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO-Gen-1	006	One (1) Caterpillar, diesel fuel-fired, emergency generator rated at 1,502 horsepower; model: AA/C-32, SN: PRH03445; Engine's Displacement is: 8.0 liter per cylinder; Manufacture/Relocation Year: 2013; This engine is subject to NSPS Subpart IIII, Tier 2 Standards.

This engine may be replaced with another engine in accordance with the temporary engine replacement provision or with another Caterpillar engine, model: AA/C-32 in accordance with the permanent replacement provision of the Alternate Operating Scenario (AOS), included in this permit as Attachment A.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. YOU MUST notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit by submitting a Notice of Startup (NOS) form to the Division. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notices>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division's website at <https://www.colorado.gov/pacific/cdphe/air-permit-self-certification>. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to

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commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
6. The manufacturer, model number and serial number of the subject equipment shall be provided to the Division within one hundred and eighty days (180) after commencement of operation. (Reference: Regulation No. 3, Part B, III.E.)

EMISSION LIMITATIONS AND RECORDS

7. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4.)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO-Gen-1	006					4.4			Point

See "Notes to Permit Holder #3" for information on emission factors and methods used to calculate limits.

Emissions of air pollutants on an annual basis shall be determined using the following formula:

$$Emissions_{Annual} = \frac{[Emission\ Factor\ (lb/1000\ gal) * Annual\ Fuel\ Usage\ (gal/yr)/1000]}{(2000lb/1\ ton)}$$

PROCESS LIMITATIONS AND RECORDS

8. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit
SO-Gen-1	006	Hours of Operation	200.0 hours per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

9. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. (Reference: Regulation No. 1, Section II.A.1. & 4.)

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10. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
11. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) including, but not limited to, the following:
 - a. Emissions of Non-Methane Hydrocarbons and Nitrogen Oxides combined shall not exceed 4.8 grams per horsepower hour.
 - b. Emissions of Carbon Monoxide shall not exceed 2.6 grams per horsepower hour.
 - c. Emissions of Particulate Matter shall not exceed 0.15 grams per horsepower hour.
 - d. All fuel used shall meet the following specifications:
 - (1) Sulfur content shall not exceed 15 ppm.
 - (2) Have a minimum cetane index of 40 or
Have a maximum aromatic compound content of 35% by volume.
Compliance shall be demonstrated by maintaining copies of the fuel specifications provided by the supplier on-site or in a readily accessible location and made available to the Division for inspection upon request.
 - e. All engines and control devices must be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer.
 - f. If engine is equipped with a diesel particulate filter, the filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. Records shall be kept of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit is approached.
 - g. The engine is used for emergency purposes, a non-resettable hour meter must be installed prior to start-up. (Reference: NSPS IIII, § 60.4209 (a))
 - h. This engine shall not be used for any purpose except emergency power generation and for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. (Reference: NSPS IIII, § 60.4211 (f))
19. The following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.
 - a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information

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available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation No. 6, Part A. General Provisions from 40 CFR 60.11)

- b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)
 - c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7
 - d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.
20. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2.b. The requirements of NSPS Subpart IIII above were determined to be RACT for this source.

OPERATING & MAINTENANCE REQUIREMENTS

21. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

22. Within 180 days of startup, the owner or operator shall demonstrate compliance with the visible opacity limit above, using EPA Method 9 to measure opacity from the generator covered by this permit. This measurement shall consist of a minimum twenty-four consecutive readings taken at fifteen second intervals over a 6 minute period. (Reference: Regulation No. 1, Section II.A.1 & 4).

Periodic Testing Requirements

23. Replacements of this unit completed as Alternative Operating Scenarios may be subject to additional testing requirements as specified in Attachment A.

ADDITIONAL REQUIREMENTS

24. All previous versions of this permit are cancelled upon issuance of this permit
25. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable).
26. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, II.C)
- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year of a criteria pollutant**, a change in annual actual emissions of five (5) tons per year or more, above the level reported on the last APEN; or

For volatile organic compounds (VOC) and nitrogen oxides sources (NO_x) in ozone nonattainment areas emitting **less than one hundred tons of VOC or NO_x per year**, a change in annual actual emissions of one (1) ton per year or more or five percent, whichever is greater, above the level reported on the last APEN; or

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For sources emitting **100 tons per year or more of a criteria pollutant**, a change in annual actual emissions of five percent or fifty (50) tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions of fifty (50) pounds of lead above the level reported on the last APEN submitted.

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 27. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 28. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 29. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____ By: _____
Sunday Fadeyi, P.E. R K Hancock III, P.E.
Permit Engineer Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This issuance	Issued to Children's Hospital Colorado

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Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.
- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.

- 3) The emission levels contained in this permit are based on the following emission factors:

Point 006:

CAS #	Pollutant	Emission Factors	Emission Factors Source
	NOx	43.639 lbs per hour	AP42 Table 3.3-1

- 4) The following emissions of non-criteria reportable air pollutants are estimated based upon the material consumptions or hours of operation. This information is listed to inform the operator of the Division's analysis of the specific compounds. This information is listed on the Division's emission inventory system.

CAS #	Substance (BIN)	Emissions
75-07-0	Acetaldehyde (A)	139 pounds per year

- 5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

- 6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NOx
NANSR	Minor: NOx

- 7) This engine is subject to 40 CFR, Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (Federally enforceable only). A copy of the complete subpart is available on the EPA website at: <http://www.epa.gov/ttn/atw/rice/ricepg.html>. All initial notifications, compliance demonstrations, and required documentation should be submitted directly to U.S. EPA Region 8 and copies sent to the Colorado Air Pollution Control Division

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- 8) Full text of the Title 40, Protection of Environment Electronic Code of Federal Regulations can be found at the website listed below:

<http://ecfr.gpoaccess.gov/>

Part 60: Standards of Performance for New Stationary Sources		
NSPS	§ 60.4200-§ 60.4219	Subpart IIII

- 9) This engine shall be used for emergency purposes only. If engine is to be used for any non-emergency purpose (demand response, peak shaving, base power, etc.), the source must submit a new Air Pollutant Emission Notice (APEN) and must meet the NSPS IIII Interim Tier 4 Standards.
- 10) Certification documentation of compliance with the NSPS IIII emission standards was not received with the initial application.
- 11) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)
- 12) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 13) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
- 14) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 15) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

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**ATTACHMENT A:
ALTERNATIVE OPERATING SCENARIOS
STATIONARY (CI) ENGINE**

October 1, 2011

2. Alternative Operating Scenarios

The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of Stationary (CI) engines has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility- Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any engine replacement performed in accordance with this AOS, and the owner or operator shall be allowed to perform such engine replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Engine Replacement

The following AOS is incorporated into this permit in order to deal with an engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period.

"Permanent" is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping).

The results of any all tests and the associated calculations required by this AOS shall be submitted to the Division within 60 days. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The owner or operator shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine.

2.1.1 The owner or operator may **temporarily** replace an existing engine that is covered by this permit with a different engine without modifying this permit; so long as the temporary replacement engine complies with all permit limitations and other requirements applicable to the existing engine. Calculation of emissions from the temporary replacement engine shall be made as set forth in section 2.1.3.

2.1.2 An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 14 calendar days of commencing operation of the replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the owner or operator is exercising an alternative operating scenario and is installing a permanent replacement engine and an analysis of any new applicable requirements for the replacement engine as required by Condition 2.2. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after

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reasonable inquiry, the statements and information included in the submittal are true, accurate and complete".

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The owner or operator shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

2.1.3 Compliance of the replacement engine with the applicable emission limitations of the original engine shall be monitored by one of the following methods:

- 1) Manufacturer certified emission factors showing compliance.
- 2) Stack tests of same make and model showing compliance. This would only be considered if the test was done under similar conditions to Colorado (i.e. at altitude).
- 3) Stack tests on the engine.

2.2 Applicable Regulations for Permanent Engine Replacements

2.2.1 NSPS for stationary compression ignition internal combustion engines: 40 CFR

Part 60, Subpart IIII

A permanent replacement engine that is ordered after July 11, 2005 and manufactured after April 1, 2006 or is modified or reconstructed after July 11, 2005 is subject to the requirements of 40 CFR Part 60, Subpart IIII. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

Note that under the provisions of Regulation No. 6. Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the date of manufacture for purposes of determining the applicability of NSPS IIII requirements).

2.2.2. MACT for Stationary Reciprocating Internal Combustion Engines: 40 CFR Part 63, Subpart ZZZZ.

Any permanent replacement engine located at either an area or major source is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

2.3 Additional Sources

The replacement of an existing engine with a new engine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; an engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite engine has to go through the appropriate Construction/Operating permitting process prior to installation.

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NO: **14DG1041**

ISSUANCE 1

DATE ISSUED:

ISSUED TO: **Children's Hospital Colorado**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Healthcare, located at 1811 Plaza Drive, SO200, Highland Ranch in Douglas County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
SO-Gen-2	007	One (1) Caterpillar, diesel fuel-fired, emergency generator rated at 1,502 horsepower; model: AA/C-32, SN: PRH03447; Engine's Displacement is: 8.0 liter per cylinder; Manufacture/Relocation Year: 2013; This engine is subject to NSPS Subpart IIII, Tier 2 Standards.

This engine may be replaced with another engine in accordance with the temporary engine replacement provision or with another Caterpillar engine, model: AA/C-32 in accordance with the permanent replacement provision of the Alternate Operating Scenario (AOS), included in this permit as Attachment A.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

1. YOU MUST notify the Air Pollution Control Division (Division) no later than fifteen days after commencement of operation under this permit by submitting a Notice of Startup (NOS) form to the Division. The Notice of Startup (NOS) form may be downloaded online at <https://www.colorado.gov/pacific/cdphe/other-air-permitting-notices>. Failure to notify the Division of startup of the permitted source is a violation of AQCC Regulation No. 3, Part B, Section III.G.1 and can result in the revocation of the permit.
2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division's website at <https://www.colorado.gov/pacific/cdphe/air-permit-self-certification>. (Reference: Regulation No. 3, Part B, III.G.2).
3. This permit shall expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of this source within 18 months after either, the date of issuance of this construction permit or the date on which such construction or activity was scheduled to

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commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; (iii) does not complete construction within a reasonable time of the estimated completion date. The Division may grant extensions of the deadline per Regulation No. 3, Part B, III.F.4.b. (Reference: Regulation No. 3, Part B, III.F.4.)

4. Within one hundred and eighty days (180) after commencement of operation, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation No. 3, Part B, Section III.E.)
5. Within thirty (30) days after commencement of operation, the permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable)
6. The manufacturer, model number and serial number of the subject equipment shall be provided to the Division within one hundred and eighty days (180) after commencement of operation. (Reference: Regulation No. 3, Part B, III.E.)

EMISSION LIMITATIONS AND RECORDS

7. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Annual records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4.)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	
SO-Gen-2	007					4.4			Point

See "Notes to Permit Holder #3" for information on emission factors and methods used to calculate limits.

Emissions of air pollutants on an annual basis shall be determined using the following formula:

$$Emissions_{Annual} = \frac{[Emission\ Factor\ (lb/1000\ gal) * Annual\ Fuel\ Usage\ (gal/yr)/1000]}{(2000lb/1\ ton)}$$

PROCESS LIMITATIONS AND RECORDS

8. This source shall be limited to the following maximum consumption, processing and/or operational rates as listed below. Annual records of the actual process rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4)

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit
SO-Gen-2	007	Hours of Operation	200.0 hours per year

STATE AND FEDERAL REGULATORY REQUIREMENTS

9. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. (Reference: Regulation No. 1, Section II.A.1. & 4.)

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10. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)
11. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, Part A, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) including, but not limited to, the following:
 - a. Emissions of Non-Methane Hydrocarbons and Nitrogen Oxides combined shall not exceed 4.8 grams per horsepower hour.
 - b. Emissions of Carbon Monoxide shall not exceed 2.6 grams per horsepower hour.
 - c. Emissions of Particulate Matter shall not exceed 0.15 grams per horsepower hour.
 - d. All fuel used shall meet the following specifications:
 - (1) Sulfur content shall not exceed 15 ppm.
 - (2) Have a minimum cetane index of 40 or
Have a maximum aromatic compound content of 35% by volume.
Compliance shall be demonstrated by maintaining copies of the fuel specifications provided by the supplier on-site or in a readily accessible location and made available to the Division for inspection upon request.
 - e. All engines and control devices must be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer.
 - f. If engine is equipped with a diesel particulate filter, the filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. Records shall be kept of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit is approached.
 - g. The engine is used for emergency purposes, a non-resettable hour meter must be installed prior to start-up. (Reference: NSPS IIII, § 60.4209 (a))
 - h. This engine shall not be used for any purpose except emergency power generation and for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. (Reference: NSPS IIII, § 60.4211 (f))
19. The following requirements of Regulation No. 6, Part A, Subpart A, General Provisions, apply.
 - a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity

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- observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation No. 6, Part A. General Provisions from 40 CFR 60.11)
- b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)
 - c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7
 - d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.
20. This source is located in an ozone non-attainment or attainment-maintenance area and subject to the Reasonably Available Control Technology (RACT) requirements of Regulation Number 3, Part B, III.D.2.b. The requirements of NSPS Subpart IIII above were determined to be RACT for this source.

OPERATING & MAINTENANCE REQUIREMENTS

21. This source is not required to follow a Division-approved operating and maintenance plan. The source shall follow the manufacturer's operating and maintenance recommendations or shall follow good air pollution control practices.

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

22. Within 180 days of startup, the owner or operator shall demonstrate compliance with the visible opacity limit above, using EPA Method 9 to measure opacity from the generator covered by this permit. This measurement shall consist of a minimum twenty-four consecutive readings taken at fifteen second intervals over a 6 minute period. (Reference: Regulation No. 1, Section II.A.1 & 4).

Periodic Testing Requirements

23. Replacements of this unit completed as Alternative Operating Scenarios may be subject to additional testing requirements as specified in Attachment A.

ADDITIONAL REQUIREMENTS

24. All previous versions of this permit are cancelled upon issuance of this permit
25. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation No. 3, Part B, III.E.) (State only enforceable).
26. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, II.C)
- a. Annually whenever a significant increase in emissions occurs as follows:
For any criteria pollutant:
For sources emitting **less than 100 tons per year of a criteria pollutant**, a change in annual actual emissions of five (5) tons per year or more, above the level reported on the last APEN; or
For volatile organic compounds (VOC) and nitrogen oxides sources (NO_x) in ozone nonattainment areas emitting **less than one hundred tons of VOC or NO_x per year**, a change in annual actual emissions of one (1) ton per year or more or five percent, whichever is greater, above the level reported on the last APEN; or

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For sources emitting **100 tons per year or more of a criteria pollutant**, a change in annual actual emissions of five percent or fifty (50) tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions of fifty (50) pounds of lead above the level reported on the last APEN submitted.

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

GENERAL TERMS AND CONDITIONS:

- 27. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 28. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 29. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

By: _____
Sunday Fadeyi, P.E.
Permit Engineer

By: _____
R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Initial Approval	This issuance	Issued to Children's Hospital Colorado

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Notes to Permit Holder (as of date of permit issuance):

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision.
- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.

- 3) The emission levels contained in this permit are based on the following emission factors:

Point 007:

CAS #	Pollutant	Emission Factors	Emission Factors Source
	NOx	43.639 lbs per hour	AP42 Table 3.3-1

- 4) The following emissions of non-criteria reportable air pollutants are estimated based upon the material consumptions or hours of operation. This information is listed to inform the operator of the Division's analysis of the specific compounds. This information is listed on the Division's emission inventory system.

CAS #	Substance (BIN)	Emissions
75-07-0	Acetaldehyde (A)	139 pounds per year

- 5) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

- 6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor: NOx
NANSR	Minor: NOx

- 7) This engine is subject to 40 CFR, Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (Federally enforceable only). A copy of the complete subpart is available on the EPA website at: <http://www.epa.gov/ttn/atw/rice/ricepg.html>. All initial notifications, compliance demonstrations, and required documentation should be submitted directly to U.S. EPA Region 8 and copies sent to the Colorado Air Pollution Control Division

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- 8) Full text of the Title 40, Protection of Environment Electronic Code of Federal Regulations can be found at the website listed below:

<http://ecfr.gpoaccess.gov/>

Part 60: Standards of Performance for New Stationary Sources		
NSPS	§ 60.4200-§ 60.4219	Subpart IIII

- 9) This engine shall be used for emergency purposes only. If engine is to be used for any non-emergency purpose (demand response, peak shaving, base power, etc.), the source must submit a new Air Pollutant Emission Notice (APEN) and must meet the NSPS IIII Interim Tier 4 Standards.
- 10) Certification documentation of compliance with the NSPS IIII emission standards was not received with the initial application.
- 11) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation No. 3, Part A, Section VI.B.)
- 12) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 13) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
- 14) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 15) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.

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**ATTACHMENT A:
ALTERNATIVE OPERATING SCENARIOS
STATIONARY (CI) ENGINE**

October 1, 2011

2. Alternative Operating Scenarios

The following Alternative Operating Scenario (AOS) for the temporary and permanent replacement of Stationary (CI) engines has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility- Alternative Operating Scenarios, Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration, and it has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any engine replacement performed in accordance with this AOS, and the owner or operator shall be allowed to perform such engine replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Engine Replacement

The following AOS is incorporated into this permit in order to deal with an engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period.

"Permanent" is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping).

The results of any all tests and the associated calculations required by this AOS shall be submitted to the Division within 60 days. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The owner or operator shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine.

2.1.1 The owner or operator may **temporarily** replace an existing engine that is covered by this permit with a different engine without modifying this permit; so long as the temporary replacement engine complies with all permit limitations and other requirements applicable to the existing engine. Calculation of emissions from the temporary replacement engine shall be made as set forth in section 2.1.3.

2.1.2 An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 14 calendar days of commencing operation of the replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the owner or operator is exercising an alternative operating scenario and is installing a permanent replacement engine and an analysis of any new applicable requirements for the replacement engine as required by Condition 2.2. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after

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reasonable inquiry, the statements and information included in the submittal are true, accurate and complete”.

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The owner or operator shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

2.1.3 Compliance of the replacement engine with the applicable emission limitations of the original engine shall be monitored by one of the following methods:

- 1) Manufacturer certified emission factors showing compliance.
- 2) Stack tests of same make and model showing compliance. This would only be considered if the test was done under similar conditions to Colorado (i.e. at altitude).
- 3) Stack tests on the engine.

2.2 Applicable Regulations for Permanent Engine Replacements

2.2.1 NSPS for stationary compression ignition internal combustion engines: 40 CFR

Part 60, Subpart IIII

A permanent replacement engine that is ordered after July 11, 2005 and manufactured after April 1, 2006 or is modified or reconstructed after July 11, 2005 is subject to the requirements of 40 CFR Part 60, Subpart IIII. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

Note that under the provisions of Regulation No. 6, Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the date of manufacture for purposes of determining the applicability of NSPS IIII requirements).

2.2.2. MACT for Stationary Reciprocating Internal Combustion Engines: 40 CFR Part 63, Subpart ZZZZ.

Any permanent replacement engine located at either an area or major source is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

2.3 Additional Sources

The replacement of an existing engine with a new engine is viewed by the Division as the installation of a new emissions unit, not “routine replacement” of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; an engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite engine has to go through the appropriate Construction/Operating permitting process prior to installation.

AIR POLLUTION CONTROL DIVISION
PRELIMINARY ANALYSIS

DATE: February 10, 2015

PERMIT NUMBER:	14DG1035
APPLICANT:	Children's Hospital Colorado
REVIEW ENGINEER:	Sunday Fadeyi, P.E.
CONTROL ENGINEER:	R K Hancock III, P.E

PROJECT DESCRIPTION

University of Colorado Denver – Five (5) new boilers and two (2) new emergency generators - Douglas County

The applicant proposes to construct five (5) new boilers and two (2) new emergency generators in Douglas County, Colorado.

The source's emissions profile is as follows:

SUMMARY OF FACILITY WIDE EMISSIONS

EMISSIONS (tons/year)	TSP	PM₁₀	PM_{2.5}	SO₂	NO_x	VOC	CO	Single HAP*	REMARKS
Current Project Emission	2.4	1.6	1.6	0.6	26.8	31.4	12.4	0.2	Minor Construction Permit
Potential To Emit	3.3	2.5	2.5	1.5	39.9	32.4	15.3	0.4	

* HAP = Hazardous Air Pollutant

SOURCE'S IMPACTS ($\mu\text{g}/\text{m}^3$)

For the criteria air pollutant emissions, the source's impact analysis is not required at this time per the Colorado Modeling Guideline for Air Quality Permits, Table 1 Therefore it is assumed that, the source, as proposed, will not cause any violation of the National Ambient Air Quality Standard.

SOURCE CLASSIFICATION

The project has the potential to emit (PTE) of all the criteria pollutants are bellow the major source levels and the facility is a true minor. But the emissions of NO_x at 26.8 and VOC at 31.4 tons per year are above 25 tons per year and therefore trigger public notice requirement. ~~Hence, the need for this public notice.~~

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - General

Permit Number: 14Δ61035 Emission Source AIRS ID: 035 / 07591 [Leave blank unless APCD has already assigned a permit # & AIRS ID]

Facility Equipment ID: SO-SB-1 [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 - Administrative Information

Company Name: Childrens Colorado NAICS, or SIC Code: _____

Source Name: South Campus

Source Location: 1811 Plaza Drive, SO200 County: Douglas

Highlands Ranch, CO 80129 Elevation: 5,614 Feet

Portable Source Home Base: Childrens Colorado

Main

Mailing Address: 13123 East 16th Avenue, BO50 ZIP Code: 80045

Aurora, Colorado

Person To Contact: Thomas Wisely Phone Number: 720-478-0005

E-mail Address: thomas.wisely@childrenscolorado.org Fax Number: 720-478-7057

Section 02 - Requested Action (check applicable request boxes)

- Request for NEW permit or newly reported emission source
- Request PORTABLE source permit
- Request MODIFICATION to existing permit (check each box below that applies)
 - Change fuel or equipment Change company name
 - Change permit limit Transfer of ownership Other
- Request to limit HAPs with a Federally enforceable limit on PTE
- Request APEN update only (check the box below that applies)
 - Revision to actual calendar year emissions for emission inventory
 - Update 5-Year APEN term without change to permit limits or previously reported emissions

Additional Info. & Notes:

Section 03 - General Information

For existing sources, operation began on: _____ / _____ / _____

Normal Hours of Source Operation: 24 hours/day 7 days/week Y weeks/year

General description of equipment and purpose: Steam Boilers for Hospital

Will this equipment be operated in any NAAQS nonattainment area? Yes No Don't know

(<http://www.cdphe.state.co.us/ap/attainmaintain.html>)

Section 04 - Processing/Manufacturing Equipment Information & Material Use

Description of equipment¹: _____ Model No.: _____ Serial No.: _____

Manufacturer: _____

Description	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Design Process Rate (Specify Units/Hour)
Raw Materials:			
Finished Products:			
Other Process:			

¹If additional space is required, please attach a separate list of equipment, materials and throughputs.

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)

This notice is valid for five (5) years. Submit a revised APEN prior to expiration of five-year term, or when a significant change is made (increase production, new equipment, change in fuel type, etc).

Mail this form along with a check for \$152.90 to:
Colorado Department of Public Health & Environment
APCD-SS-BI
4300 Cherry Creek Drive South
Denver, CO 80246-1530

For guidance on how to complete this APEN for **2014**
 Air Pollution Control Division: (303) 692-3150
 Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
 APEN forms: <http://www.cdphe.state.co.us/ap/downloadforms.html>
 Application status: <http://www.cdphe.state.co.us/ap/ss/sspcept.html>

- Check box to request copy of draft permit prior to issuance.
- Check box to request copy of draft permit prior to public notice.

Section 05 - Emission Release Information (Attach a separate sheet with relevant information in the event of multiple releases; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Base Elevation (feet)	Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of outlet (check one): Vertical Vertical with obstructing raincap Horizontal Down Other (Describe): _____
 Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 14" Other: Length (inches) = _____ Width (inches) = _____

Section 06 - Combustion Equipment & Fuel Consumption Information

Company equipment Identification No.: SO_SB_1 Manufacturer: Fulton Model: VMP-130 Serial No.: F1015552A

Fuel Type	Design Input Rate (10 ⁶ Btu/hr)	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Fuel Heating Value (Indicate: Btu/lb, Btu/gal, Btu/SCF)	Percent by Weight			Seasonal Fuel Use (% of Annual Use)					
					Sulfur	Ash	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov			
NAT-GAS	<u>6000MBH</u>												
#2 FUEL OIL	<u>6000MBH</u>				BTU/SCF								

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Section 07 - Emissions Inventory Information & Emission Control Information

Attach any emission calculations and emission factor documentation to this APEN form.
 Emission Factor Documentation attached. Data year for actual calendar yr. emissions below & throughput above (e.g. 2007): _____

Pollutant	Control Device Description		Overall Collection Efficiency	Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ³		Requested Permitted Emissions ⁴		Estimation Method or Emission Factor Source
	Primary	Secondary			Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP											
PM ₁₀											
PM _{2.5}											
SO _x											
NO _x											
VOC											
CO											

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

³Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.
⁴If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 07.

Section 08 - Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.

Signature of Person Legally Authorized to Supply Data: [Signature] Date: May 19 2011 Thomas Wisely
 Name of Legally Authorized Person (Please print): Thomas Wisely Title: Chief Engineer

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – General

Permit Number: 14161036 Emission Source AIRS ID: 035107541002

Section 05 – Emission Release Information (Attach a separate sheet with relevant information in the event of multiple releases; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Base Elevation (feet)	Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of outlet (check one): Vertical Vertical with obstructing raincap Horizontal Down Other (Describe): _____

Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 14" Other: Length (inches) = _____ Width (inches) = _____

Section 06 – Combustion Equipment & Fuel Consumption Information

Company equipment Identification No.: SO_SB_2 Manufacturer: Fulton Model: VMP-130 Serial No.: F1015674A

Fuel Type	Design Input Rate (10 ⁶ Btu/hr)	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Fuel Heating Value (Indicate: Btu/lb, Btu/gal, Btu/SCF)	Percent by Weight			Seasonal Fuel Use (% of Annual Use)			
					Sulfur	Ash		Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
NAT-GAS	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>	<u>BTU/SCF</u>							
#2 FUEL OIL	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>	<u>BTU/GAL</u>							

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Section 07 – Emissions Inventory Information & Emission Control Information

Attach any emission calculations and emission factor documentation to this APEN form.

Pollutant	Control Device Description		Overall Collection Efficiency	Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ³		Requested Permitted Emissions ⁴		Estimation Method or Emission Factor Source
	Primary	Secondary			Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP											
PM ₁₀											
PM _{2.5}											
SO _x											
NO _x											
VOC											
CO											

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

³ Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.

⁴ If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 07.

Section 08 – Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.



Thomas Wisely
 Name of Legally Authorized Person (Please print)
Chief Engineer
 Title

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – General

Permit Number: 14B61036 [Leave blank unless APCD has already assigned a permit # & AIRS ID] **Emission Source AIRS ID:** 035 10754 1002

Facility Equipment ID: SO-SB-2 [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 – Administrative Information

Company Name: Childrens Colorado **NAICS, or SIC Code:** Request for NEW permit or newly reported emission source

Source Name: South Campus **SIC Code:** Request PORTABLE source permit

Source Location: 1811 Plaza Drive, SO200 **County:** Douglas Request MODIFICATION to existing permit (check each box below that applies)

Portable Source Home Base: Highlands Ranch, CO 80129 **Elevation:** 5,614 Feet Change fuel or equipment Change company name

Childrens Colorado Change permit limit Transfer of ownership Other

Mailing Address: Main **ZIP Code:** 80045 Request to limit HAPs with a Federally enforceable limit on PTE

13123 East 16th Avenue, BO50 **ZIP Code:** 80045 Request APEN update only (check the box below that applies)

Person To Contact: Thomas Wisely **Phone Number:** 720-478-0005 Revision to actual calendar year emissions for emission inventory

E-mail Address: thomas.wisely@childrenscolorado.org **Fax Number:** 720-478-7057 Update 5-Year APEN term without change to permit limits or previously reported emissions

Additional Info. & Notes:

Section 03 – General Information

For existing sources, operation began on: _____ / _____ / _____ **For new or reconstructed sources, the projected startup date is:** _____ / _____ / _____

Normal Hours of Source Operation: 24 hours/day / 7 days/week / Y weeks/year

General description of equipment and purpose: Steam Boilers for Hospital

Will this equipment be operated in any NAAQS nonattainment area? Yes No Don't know
<http://www.cdphe.state.co.us/ap/attainment.html>

Section 04 – Processing/Manufacturing Equipment Information & Material Use

Description of equipment ¹	Model No.:	Serial No.:	Description	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Design Process Rate (Specify Units/Hour)
Raw Materials:						
Finished Products:						
Other Process:						

¹If additional space is required, please attach a separate list of equipment, materials and throughputs.

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

FORM APCD-200

311616

**Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)**

This notice is valid for five (5) years. Submit a revised APEN prior to expiration of five-year term, or when a significant change is made (increase production, new equipment, change in fuel type, etc).

Mail this form along with a check for \$152.90 to:
**Colorado Department of Public Health & Environment
 APCD-SS-BI
 4300 Cherry Creek Drive South
 Denver, CO 80246-1530**

For guidance on how to complete this APEN form:
 Air Pollution Control Division: (303) 692-3150
 Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
 APEN forms: <http://www.cdphe.state.co.us/ap/download/forms.html>
 Application status: <http://www.cdphe.state.co.us/ap/ss/spepl.html>

Check box to request copy of draft permit prior to issuance.
 Check box to request copy of draft permit prior to public notice.

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – General

Permit Number: 14061037 Emission Source AIRS ID: 035107591003

Section 05 – Emission Release Information (Attach a separate sheet with relevant information in the event of multiple releases; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Base Elevation (feet)	Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of outlet (check one): Vertical Vertical with obstructing raincap Horizontal Down Other (Describe): _____

Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 14" Other: Length (inches) = _____ Width (inches) = _____

Section 06 – Combustion Equipment & Fuel Consumption Information

Company equipment Identification No.: SO_HWB_1 Manufacturer: Fulton Model: VTG6000 Serial No.: 8011

Fuel Type	Design Input Rate (10 ⁶ Btu/hr)	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Fuel Heating Value (Indicate: Btu/lb, Btu/gal, Btu/SCF)		Percent by Weight			Seasonal Fuel Use (% of Annual Use)			
				BTU/SCF	BTU/GAL	Sulfur	Ash	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
NAT-GAS	<u>6000MBH</u>											
#2 FUEL OIL	<u>6000MBH</u>											

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Section 07 – Emissions Inventory Information & Emission Control Information

Attach any emission calculations and emission factor documentation to this APEN form.

Pollutant	Control Device Description		Overall Collection Efficiency	Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ³		Requested Permitted Emissions ⁴		Estimation Method or Emission Factor Source
	Primary	Secondary			Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
	Data year for actual calendar yr. emissions below & throughput above (e.g. 2007): _____										
TSP											
PM ₁₀											
PM _{2.5}											
SO _x											
NO _x											
VOC											
CO											

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

³ Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.

⁴ If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 07.

Section 08 – Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.

Signature of Person Legally Authorized to Supply Data: Thomas Wisely Date: _____
 Name of Legally Authorized Person (Please print): Thomas Wisely Title: Chiefengineer

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - General

Permit Number: 1461037 [Leave blank unless APCD has already assigned a permit # & AIRS ID] **Emission Source AIRS ID:** 035 / 0759 / 003
Facility Equipment ID: SO-HWB-1 [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 - Administrative Information

Company Name: Childrens Colorado NAICS, or **Request for NEW permit or newly reported emission source**
Source Name: South Campus SIC Code: **Request PORTABLE source permit**
Source Location: 1811 Plaza Drive, SO200 County: Douglas **Request MODIFICATION to existing permit (check each box below that applies)**
Highlands Ranch, CO 80129 Elevation: 5,614 Feet Change fuel or equipment Change company name
Portable Source Change permit limit Transfer of ownership Other
Home Base: Childrens Colorado
Mailing Address: Main ZIP Code: 80045
13123 East 16th Avenue, BO50
Aurora, Colorado
Person To Contact: Thomas Wisely Phone Number: 720-478-0005
E-mail Address: thomas.wisely@childrenscolorado.org Fax Number: 720-478-7057

Section 02 - Requested Action (check applicable request boxes)

Request to limit HAPs with a Federally enforceable limit on PTE
 Request APEN update only (check the box below that applies)
 Revision to actual calendar year emissions for emission inventory
 Update 5-Year APEN term without change to permit limits or previously reported emissions
Additional Info. & Notes:

Section 03 - General Information

For existing sources, operation began on: / / For new or reconstructed sources, the projected startup date is: / /
Normal Hours of Source Operation: 24 hours/day 7 days/week Y weeks/year
General description of equipment and purpose: Heating water Boilers for Hospital

Will this equipment be operated in any NAAQS nonattainment area? Yes No Don't know
<http://www.cdphe.state.co.us/ap/attainmentmain.html>

Section 04 - Processing/Manufacturing Equipment Information & Material Use

Description of equipment¹: _____ Model No.: _____ Serial No.: _____
 Manufacturer: _____

	Description	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Design Process Rate (Specify Units/Hour)
Raw Materials:				
Finished Products:				
Other Process:				

¹If additional space is required, please attach a separate list of equipment, materials and throughputs.

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)

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 Mail this form along with a check for \$152.90 to:
 Colorado Department of Public Health & Environment
 APCD-SS-BI
 4300 Cherry Creek Drive South
 Denver, CO 80246-1530 *4300 Cherry Creek Drive South*

For guidance on how to complete this APEN form:
 Air Pollution Control Division: (303) 692-3150
 Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
 APEN forms: <http://www.cdphe.state.co.us/ap/download/forms.html>
 Application status: <http://www.cdphe.state.co.us/ap/ss/spcpl.html>

Check box to request copy of draft permit prior to issuance.
 Check box to request copy of draft permit prior to public notice.

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - General

Permit Number: 14D6036 Emission Source AIRS ID: 03510759 / 001

Section 05 - Emission Release Information (Attach a separate sheet with relevant information in the event of multiple releases; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Base Elevation (feet)	Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of outlet (check one): Vertical Vertical with obstructing raincap Horizontal Other (Describe): _____

Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 14" Other: Length (inches) = _____ Width (inches) = _____

Section 06 - Combustion Equipment & Fuel Consumption Information

Company equipment Identification No.: SO_HWD_2 Manufacturer: Fulton Model: VTG6000 Serial No.: 8009

Fuel Type	Design Input Rate (10 ⁶ Btu/hr)	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Fuel Heating Value (Indicate: Btu/lb, Btu/gal, Btu/SCF)		Percent by Weight		Seasonal Fuel Use (% of Annual Use)			
				BTU/SCF		Ash		Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
NAT-GAS	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>	<u>BTU/SCF</u>							
#2 FUEL OIL	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>	<u>BTU/GAL</u>							
	<u>600</u>										

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Section 07 - Emissions Inventory Information & Emission Control Information

Attach any emission calculations and emission factor documentation to this APEN form.

Emission Factor Documentation attached Data year for actual calendar yr. emissions below & throughput above (e.g. 2007): _____

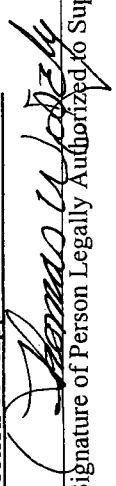
Pollutant	Control Device Description		Overall Collection Efficiency	Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ³		Requested Permitted Emissions ⁴		Estimation Method or Emission Factor Source
	Primary	Secondary			Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP											
PM ₁₀											
PM _{2.5}											
SO _x											
NO _x											
VOC											
CO											

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

³ Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.

⁴ If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 07.

Section 08 - Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.



 Signature of Person Legally Authorized to Supply Data _____ Date _____

Thomas Wisely _____ Chief Engineer

 Name of Legally Authorized Person (Please print) _____ Title _____

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - General

Permit Number: 14161038

[Leave blank unless APCD has already assigned a permit # & AIRS ID]

Emission Source AIRS ID: 035 / 0759 / 004

Facility Equipment ID: SO-HWB-2

[Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 - Administrative Information

Company Name: Childrens Colorado

Source Name: South Campus

Source Location: 1811 Plaza Drive, SO200

Portable Source: Highlands Ranch, CO 80129

Home Base: Childrens Colorado

Mailing Address: 13123 East 16th Avenue, BO50

Person To Contact: Thomas Wisely

E-mail Address: thomas.wisely@childrenscolorado.org

NAICS, or SIC Code:

County: Douglas

Elevation: 5,614 Feet

ZIP Code: 80045

Phone Number: 720-478-0005

Fax Number: 720-478-7057

Section 02 - Requested Action (check applicable request boxes)

- Request for NEW permit or newly reported emission source
- Request PORTABLE source permit
- Request MODIFICATION to existing permit (check each box below that applies)
- Change fuel or equipment
- Change company name
- Change permit limit
- Transfer of ownership
- Other

- Request to limit HAPs with a Federally enforceable limit on PTE
- Request APEN update only (check the box below that applies)
- Revision to actual calendar year emissions for emission inventory
- Update 5-Year APEN term without change to permit limits or previously reported emissions

Additional Info. & Notes:

Notes:

[Faint handwritten notes and stamps]

[Faint handwritten notes and stamps]

Section 03 - General Information

For existing sources, operation began on: _____ / _____ / _____

Normal Hours of Source Operation: 24 hours/day 7 days/week Y weeks/year

General description of equipment and purpose: Heating water Boilers for Hospital

Will this equipment be operated in any NAAQS nonattainment area? Yes No Don't know

For new or reconstructed sources, the projected startup date is: _____ / _____ / _____

Section 04 - Processing/Manufacturing Equipment Information & Material Use

Description of equipment:

Manufacturer: _____ Model No.: _____

Serial No.: _____

	Description	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Design Process Rate (Specify Units/Hour)
Raw Materials:				
Finished Products:				
Other Process:				

¹If additional space is required, please attach a separate list of equipment, materials and throughput.

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

**Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)**

This notice is valid for five (5) years. Submit a revised APEN prior to expiration of five-year term, or when a significant change is made (increase production, new equipment, change in fuel type, etc).

Mail this form along with a check for \$152.90 to:
**Colorado Department of Public Health & Environment
 APCD-SS-BI
 4300 Cherry Creek Drive South
 Denver, CO 80246-1530**

For guidance on how to complete this APEN form:
 Air Pollution Control Division:
 Small Business Assistance Program (SBAP):
 APEN forms: <http://www.cdphe.state.co.us/ap/download/forms.html>
 Application status: <http://www.cdphe.state.co.us/ap/sspctl.html>

11/19/14
 (303) 692-3150
 (303) 692-3148 or
 (303) 692-3175

- Check box to request copy of draft permit prior to issuance.
- Check box to request copy of draft permit prior to public notice.

FORM APCD-200

311619

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - General

Emission Source AIRS ID: 035107591005

Permit Number: 14061031

Section 05 - Emission Release Information (Attach a separate sheet with relevant information in the event of multiple releases; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Base Elevation (feet)	Discharge Height Above Ground Level (Feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of outlet (check one): Vertical Vertical with obstructing raincap Horizontal Other (Describe): _____

Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 14" Other: Length (inches) = _____ Width (inches) = _____

Section 06 - Combustion Equipment & Fuel Consumption Information

Company equipment Identification No.: SO_HWB_3 Manufacturer: Fulton Model: VTG6000 Serial No.: 8008

Fuel Type	Design Input Rate (10 ⁶ Btu/hr)	Actual Level (For Data Year)	Annual Requested Permitted Level ² (Specify Units)	Fuel Heating Value (Indicate: Btu/lb, Btu/gal, Btu/SCF)		Percent by Weight			Seasonal Fuel Use (% of Annual Use)			
				BTU/SCF	BTU/GAL	Sulfur	Ash	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
NAT-GAS	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>	<u>BTU/SCF</u>	<u>BTU/GAL</u>							
#2 FUEL OIL	<u>6000MBH</u>	<u>6000MBH</u>	<u>6000MBH</u>									
	<u>600</u>											

²Requested values will become permit limitations. Requested level should consider process growth over the next five years.

Section 07 - Emissions Inventory Information & Emission Control Information

Attach any emission calculations and emission factor documentation to this APEN form.

Pollutant	Control Device Description		Overall Collection Efficiency	Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ³		Requested Permitted Emissions ⁴		Estimation Method or Emission Factor Source
	Primary	Secondary			Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP											
PM ₁₀											
PM _{2.5}											
SO _x											
NO _x											
VOC											
CO											

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

³ Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.
⁴ If Requested Permitted Emissions is left blank, the APCD will calculate emissions based on the information supplied in sections 03 - 07.

Section 08 - Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct.


 Signature of Person Legally Authorized to Supply Data Thomas Wisely Chiefengineer
 Date _____ Name of Legally Authorized Person (Please print) Title

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - Reciprocating Internal Combustion Engine

Permit Number: 14461040 Emission Source AIRS ID: 03510759 / 0006
Facility Equipment ID: SO-Gen-1 [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 - Administrative Information

Company Name: Childrens Colorado NAICS, or SIC Code: _____
Source Name: Cat Generator County: douglas
Source Location: 1811 Plaza Drive, SO200 Elevation: 5,614 Feet
Highlands Ranch, Co
Portable Source Home Base: Childrens Colorado
Mailing Address: 13123 East 16th Ave, Aurora ZIP Code: 80045
Person To Contact: Thomas Wisely Phone Number: 720-478-0005
E-mail Address: thomas.wisely@childrenscolorado.org Fax Number: 720-478-7057

Section 02 - Requested Action (check applicable request boxes)

Request for NEW permit or newly reported emission source
 Request for coverage under GENERAL PERMIT number GP02 (Natural Gas Only)
 Request MODIFICATION to existing permit (check each box below that applies)
 Change fuel or equipment Change company name
 Change permit limit Transfer of ownership Other
 Request PORTABLE source permit
 Request APEN update only (check the box below that applies)
 Revision to actual calendar year emissions for emission inventory
 Update 5-Year APEN term without change to permit limits or previously reported Emissions
 Notification of AOS permanent replacement

Section 03 - General Information

For existing sources, operation began on: _____ / _____ / _____
For new or reconstructed sources, the projected startup date is: _____ / _____ / _____
Normal hours of source operation: _____ hours/day _____ days/week _____ weeks/year
General description of equipment purpose: Produce Emergency power to Hospital
Date the engine was ordered: _____ Date engine construction commenced: _____
Date the engine was relocated into Colorado: _____ Date of any reconstruction/modification: _____
Will this equipment be operated in any NAAQS nonattainment area? (http://www.cdphe.state.co.us/ap/attainmaintain.html) Yes No Don't know

Section 04 - Engine Information

Engine date of manufacture: 2013 Model: AA/C-32 Serial No.: PRH03445
Manufacturer: Cat Engine displacement: V-12 L/cyl
Engine function: Primary and/or peaking power Emergency back-up power
 Compression Pump jack Water pump Other:
Manufacturer's maximum rated horsepower @ sea level: 1,502 BHP @ 1,800 RPM
Manufacturer's maximum site rating: 1,502 BHP @ 1,800 RPM
Engine Brake Specific Fuel Consumption @ 100% Load: _____ Btu/HP-hr
Cycle Type: 2-Stroke 4-Stroke
Ignition Source: Spark Compression
What is the maximum number of hours this engine is used for emergency back-up power? 200 Hours/year

Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)
This notice is valid for five (5) years. Submit a revised APEN prior to expiration of five-year term, or when a significant change is made (increase production, new equipment, change in fuel type, etc).
Mail this form along with a check for \$152.90 per APEN and \$1,500 for each general permit registration to:
Colorado Department of Public Health & Environment
APCD-SS-BI
4300 Cherry Creek Drive South
Denver, CO 80246-1530
For guidance on how to complete this APEN form: <http://www.cdphe.state.co.us/ap/downloadforms.html>
Air Pollution Control Division: (303) 692-3150
Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
APEN forms: <http://www.cdphe.state.co.us/ap/downloadforms.html>
Application status: <http://www.cdphe.state.co.us/ap/ss/sspcpt.html>

Check box to request copy of draft permit prior to issuance.
 Check box to request copy of draft permit prior to public notice.

FORM APCD-201

311621

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit - Reciprocating Internal Combustion Engine

Permit Number: 14Δ61040

Emission Source AIRS ID: 035107591006

Section 05 - Stack Information (Attach a separate sheet with relevant information in the event of multiple stacks; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Stack Base Elevation (feet)	Stack Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of stack outlet (check one): Vertical Vertical with obstructing raincap Horizontal Down Other (Describe): _____
 Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 12.75 Other: Length (inches) = _____ Width (inches) = _____

Section 06 - Fuel Consumption Information

Fuel Type	Fuel Use Rate @ 100% load (SCF/hr, gal/hr)	Annual Fuel Consumption (gal/yr or MMSCF/yr)		Fuel Heating Value (Btu/lb, Btu/gal, Btu/SCF)	Sulfur Content (% wt.)	Seasonal Fuel Use (% of Annual Use)				
		Actual Reported for Calendar Year	Requested Permit Limit			Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
#2 fuel oil	72.2									

Is this engine equipped with an Air/Fuel ratio controller? Yes No

Section 07 - Emissions Inventory Information & Emission Control Information

Emission Factor Documentation attached Data year for actual calendar yr. emissions below & fuel use above (e.g. 2007): _____

Pollutant	Control Device Description		Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ¹		Requested Permitted Emissions		Estimation Method or Emission Factor Source
	Primary	Secondary		Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP										
PM ₁₀										
PM _{2.5}										
SO _x										
NO _x										
VOC										
CO										
Formaldehyde										
Acetaldehyde										
Acrolein										
Benzene										

Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

Section 08 - Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct. If this is a registration for coverage under general permit GP02, I further certify that this source is and will be operated in full compliance with each condition of general permit GP02.

Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions.

Signature of Person Legally Authorized to Supply Data: Thomas Wisely Date: _____
 Name of Legally Authorized Person (Please Print): Thomas Wisely Title: Chief Engineer

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – Reciprocating Internal Combustion Engine

Permit Number: 14D G1041 Emission Source AIRS ID: 035 / 0759 / 007
 Facility Equipment ID: SO-Gen-2 [Leave blank unless APCD has already assigned a permit # & AIRS ID] [Provide Facility Equipment ID to identify how this equipment is referenced within your organization.]

Section 01 – Administrative Information

Company Name: Childrens Colorado NAICS, or SIC Code: _____
 Source Name: Cat Generator
 Source Location: 1811 Plaza Drive, SO200 Highlands Ranch, Co County: douglas Elevation: 5,614 Feet
 Portable Source Home Base: Childrens Colorado
 Mailing Address: 13123 East 16th Ave, Aurora ZIP Code: 80045
 Person To Contact: Thomas Wisely Phone Number: 720-478-0005
 E-mail Address: thomas.wisely@childrenscolorado.org Fax Number: 720-478-7057

Section 02 – Requested Action (check applicable request boxes)

- Request for NEW permit or newly reported emission source
- Request for coverage under GENERAL PERMIT number GP02 (Natural Gas Only)
- Request MODIFICATION to existing permit (check each box below that applies)
 - Change fuel or equipment Change company name
 - Change permit limit Transfer of ownership Other
- Request PORTABLE source permit
- Request APEN update only (check the box below that applies)
 - Revision to actual calendar year emissions for emission inventory
 - Update 5-Year APEN term without change to permit limits or previously reported emissions
 - Notification of AOS permanent replacement

Addl. Info. & Notes:

Section 03 – General Information

For existing sources, operation began on: _____ / _____ / _____
 Normal hours of source operation: _____ hours/day _____ days/week _____ weeks/year
 General description of equipment purpose: Produce Emergency power to Hospital
 Date the engine was ordered: _____
 Date the engine was relocated into Colorado: _____
 Will this equipment be operated in any NAAQS nonattainment area? (http://www.cdphe.state.co.us/ap/attainment.html) _____

For new or reconstructed sources, the projected startup date is: _____ / _____ / _____

Section 04 – Engine Information

Engine date of manufacture: 2013 Engine displacement: V-12 L/cyl _____
 Manufacturer: Cat Model: AA/C-32 Serial No.: PRH03447
 Engine function:

- Primary and/or peaking power
- Emergency back-up power
- Compression
- Pump jack
- Water pump
- Other: _____

 Manufacturer's maximum rated horsepower @ sea level: 1,502 BHP @ 1,800 RPM
 Manufacturer's maximum site rating: 1,502 BHP @ 1,800 RPM kW
 Engine Brake Specific Fuel Consumption @ 100% Load: _____
 Cycle Type:

- 2-Stroke
- 4-Stroke
- Spark
- Compression

 Ignition Source:

- Lean Burn
- Natural
- Turbocharged
- Rich Burn

 What is the maximum number of hours this engine is used for emergency back-up power? 200 Hours/year

Colorado Department of Public Health and Environment
Air Pollution Control Division (APCD)

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 Colorado Department of Public Health & Environment
 APCD-SS-BI
 4300 Cherry Creek Drive South
 Denver, CO 80246-1530

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For guidance on how to complete this APEN form:
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 Small Business Assistance Program (SBAP): (303) 692-3148 or (303) 692-3175
 APEN forms: <http://www.cdphe.state.co.us/ap/downloadforms.html>
 Application status: <http://www.cdphe.state.co.us/ap/ss/sspcept.html>

FORM APCD-201

311622

AIR POLLUTANT EMISSION NOTICE (APEN) & Application for Construction Permit – Reciprocating Internal Combustion Engine

Permit Number: 14Δ61041

Emission Source AIRS ID: 035107591007

Section 05 – Stack Information (Attach a separate sheet with relevant information in the event of multiple stacks; provide datum & either Lat/Long or UTM)

Operator Stack ID No.	Stack Base Elevation (feet)	Stack Discharge Height Above Ground Level (feet)	Temp. (°F)	Flow Rate (ACFM)	Velocity (ft/sec)	Moisture (%)	Horizontal Datum (NAD27, NAD83, WGS84)	UTM Zone (12 or 13)	UTM Easting or Longitude (meters or degrees)	UTM Northing or Latitude (meters or degrees)	Method of Collection for Location Data (e.g. map, GPS, GoogleEarth)

Direction of stack outlet (check one): Vertical Vertical with obstructing raincap Horizontal Down Other (Describe): _____

Exhaust Opening Shape & Size (check one): Circular: Inner Diameter (inches) = 12.75 Other: Length (inches) = _____ Width (inches) = _____

Section 06 – Fuel Consumption Information

Fuel Type	Fuel Use Rate @ 100% load (SCF/hr. gal/hr)	Annual Fuel Consumption (gal/yr or MMSCF/yr)		Fuel Heating Value (Btu/lb, Btu/gal, Btu/SCF)	Sulfur Content (% wt.)	Seasonal Fuel Use (% of Annual Use)				
		Actual Reported for Calendar Year	Requested Permit Limit			Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
#2 fuel oil	72.2									

Is this engine equipped with an Air/Fuel ratio controller? Yes No

Section 07 – Emissions Inventory Information & Emission Control Information

Emission Factor Documentation attached Data year for actual calendar yr. emissions below & fuel use above (e.g. 2007): _____

Pollutant	Control Device Description		Control Efficiency (% Reduction)	Emission Factor		Actual Calendar Year Emissions ¹		Requested Permitted Emissions		Estimation Method or Emission Factor Source
	Primary	Secondary		Uncontrolled Basis	Units	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	Uncontrolled (Tons/Year)	Controlled (Tons/Year)	
TSP										
PM ₁₀										
PM _{2.5}										
SO _x										
NO _x										
VOC										
CO										
Formaldehyde										
Acetaldehyde										
Acrolein										
Benzene										

¹ Annual emission fees will be based on actual emissions reported here. If left blank, annual emission fees will be based on requested emissions. Please use the APCD Non-Criteria Reportable Air Pollutant Addendum form to report pollutants not listed above.

Section 08 – Applicant Certification - I hereby certify that all information contained herein and information submitted with this application is complete, true and correct. If this is a registration for coverage under general permit GP02, I further certify that this source is and will be operated in full compliance with each condition of general permit GP02.

Signature of Person Legally Authorized to Supply Data: Thomas Wisely Date: _____ Title: Chiefengineer