



CITY OF SAN ANTONIO

DEVELOPMENT SERVICES AND FIRE DEPARTMENT
PO BOX 839966 SAN ANTONIO TEXAS 78283-3966



TO: Development Services and Fire Department Customers

SUBJECT: **INFORMATION BULLETIN 190**
Gaseous Suppression System Permit Application and Checklist

DATE: April 3, 2011/*Revised August 1, 2014/Revised May 11, 2015*

CREATED BY: Development Services and Fire Departments

Purpose:

As a customer service initiative, the Development Services Department (DSD) and the San Antonio Fire Department (SAFD) created this **revised** bulletin to update Information Bulletin (IB) 190 on the Gaseous Suppression System Permit application and checklist.

The following Application and Checklist is furnished for the purpose of expediting the City of San Antonio review of plans and specifications submitted for gaseous suppression system permits issued by the San Antonio Fire Department. The Checklist does not constitute a complete list of all items that may be required for approval during the plans review process prior to permit issuance. The owner or owner's representative is responsible for compliance with the requirements of applicable City of San Antonio codes and standards.

Scope:

Permit and Licensing Requirements

Gaseous suppression system permits will be issued to the Extinguishing System Contractor performing the work. Such contractor shall be licensed per the licensing regulations of the Texas Department of Insurance - State Fire Marshal's Office.

Required plans and submittal location

Drawings shall be of such size necessary to provide legible text, dimensions and details. All plans, specifications and system calculations shall bear the non-photocopied seal of an engineer registered to practice in the State of Texas or the name and license number as prescribed by Title 28 of the Texas Administrative Code, Chapter 34, Subchapter E (Fire Extinguisher Rules) Section 34.518 (Fire Extinguisher Fixed System Plans for Other Than Pre-engineered Systems) of a Type PL licensee (EPL) licensed by the Texas Department of Insurance - State Fire Marshal's Office. Additionally, plans specifications and system calculations for associated fire alarm equipment installed for releasing and notification shall bear the non-photocopied seal of an engineer registered to practice in the State of Texas or the name and license number as prescribed by Title 28 of the Texas Administrative Code, Chapter 34, Subchapter F (Fire Alarm Rules) Section 34.619 (Fire Alarm and Detection System Plans and Record Drawings) of a Fire Alarm Planning Superintendent (APS) licensed by the Texas Department of Insurance - State Fire Marshal's Office. Plans submitted for permit review by the City shall be completed 'For Construction' documents. Plans including the phrase 'Preliminary - Not For Construction' will not be accepted for permit review. This requirement is necessary to expedite your project through the City's plans review procedures and save unnecessary delays caused by review of construction plans that are incomplete and not for construction.

In the case of multiple suppression systems, (separate protected areas each equipped with a separate piping system and control equipment) a separate permit application will be required for each system.

A completed Application and Checklist (see Section II of this document) along with two (2) gaseous suppression system drawing sets, two (2) copies of the gaseous suppression system submittal books shall be submitted to the following location:

Development Services/San Antonio Fire Department – Fire Prevention Division
Attn: Fire Alarm Fire Protection Specialist
1901 S. Alamo Street
San Antonio, Texas 78204-1605
Tel: (210) 207-8410, Fax: (210) – 207-7949

RESUBMITTAL OF PLANS

Resubmittal of plans in response to plan review comments of City of San Antonio plan review staff must be made through the San Antonio Fire Department to ensure that the approved gaseous suppression system permit plans comply with the requirements of City of San Antonio departments involved in the plan review process. Refer to City of San Antonio IB111 for instructions on submitting responses to plan review denial comments. Note that the responses to the plans review comments are to include a cover letter indicating how each comment has been resolved. Information Bulletin 111 may be obtained from the Planning and Development Services Department website at the following address:

Important Note: Please pay special attention to procedural item 4, section c, subsection ii of Information Bulletin 111.

You are encouraged to contact the plans examiners involved in order to clarify the requirements of their review. However, no approvals will be given without resubmitting plans or required information through the San Antonio Fire Department for incorporation into the approved gaseous suppression system permit plans.

Stamping of additional sets of plans

One set of plans shall be provided to the applicant upon permit issuance. At this time, the City of San Antonio will not stamp or return additional sets of plans if submitted. It is up to the extinguishing system installing contractor to make copies of the approved plans that they receive from the City of San Antonio if needed.

Applicable Codes and Standards:

The following model codes and National Fire Protection Association (NFPA) standards are currently adopted as amended by the City of San Antonio Code:

International Building Code, 20015 Edition, as adopted by Chapter 6, Buildings, Code of Ordinances
International Fire Code, 20015 Edition, as adopted by Chapter 11, Fire Prevention, Code of Ordinances
NFPA 72 - The National Fire Alarm and Signaling Code, 2013 Edition
NFPA 70 - The National Electrical Code, 2014 Edition
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2015 Edition

Estimated Plan Review Turnaround Time:

New system: 90% of plans reviewed in twenty-one (21) calendar days or less.

Resubmittal: 90% of plans reviewed in seven (7) calendar days or less.

Record Drawing and Post Permit Revision Review: 90% of plans reviewed in seven (7) calendar days or less. Note that a fee of \$100.00 per hour with a one (1) hour minimum applies to all record drawing and post permit revision reviews.

Please note that the estimated plan review turnaround times stated above reflect the time required to complete a first review or a resubmittal review and does not indicate the time required for approval of the plans. Approval

of the plans depends upon the accuracy and completeness of the submitted plans by the owner's design professional.

Also note that these turnaround times listed above are estimates only and may be changed due to factors such as the City's staffing levels, current workload, quality of plans submitted, etc. Please contact the Senior Fire Protection Engineer at (210) 207-0116 or the Fire Alarm Fire Protection Specialist at (210) 207-0125 for current turnaround times.

The following submittal requirements are based upon the requirements of the International Fire Code, 2015 Edition, Chapter 9, Section 901.2, National Fire Protection Association Standard 72 (National Fire Alarm and Signaling Code), 2015 Edition, Chapter 4, Section 4.4.4.2, and the National Fire Protection Association Standard 2001 (Standard on Clean Agent Fire Extinguishing Systems), 2015 Edition, Chapter 5, Section 5.1.2, Subsection 5.1.2.2.

Special Considerations for Pre-Engineered Systems:

A Pre-Engineered System is defined by NFPA 2001, 2015 Edition, Chapter 3, Section 3.3.24 as; "A system having pre determined flow rates, nozzle pressures, and quantities of agent. These systems have the specific pipe size, maximum and minimum pipe lengths, flexible hose specifications, number of fittings, and number and types of nozzles prescribed by a testing laboratory. The hazards protected by these systems are specifically limited as to type and size by a testing laboratory based upon actual fire tests. Limitations on hazards that can be protected by these systems are contained in the manufacturer's installation manual which is referenced as part of the listing."

Considering this definition and in accordance with NFPA 2001, 2015 Edition, Chapter 5, Section 5.1.2.3.1, certain items prescribed as part of the submittal package will not be required for review, and are as follows:

- Specified internal volume of the agent container
- Nozzle flow rates
- Equivalent lengths of pipe and fitting and hose
- Flow calculations when the system is used within its listed limitations

Note that Section 5.1.2.3.1 states; "The information required by the listed system design manual, however shall be made available to the authority having jurisdiction for verification that the system is within its listed limitations." This requirement shall be met by submittal of one (1) copy of the listed system design manual with the submittal package for any proposed pre-engineered system.

Special Considerations for Inspections (Witnessed Tests):

Note that these are the minimum requirements for submittal to the City of San Antonio Fire Department Fire Prevention Division. Failure to provide this information will result in plan review denial. Refer to the checklist for any additional details.

Summary:

This information bulletin is for informational purposes only.

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GASEOUS SUPPRESSION PERMIT APPLICATION AND CHECKLIST

(Please complete all of the following information. Please print.)

A. General Information (Required):				
Type of Work (select all that apply):	New System:	<input type="checkbox"/>	Existing System:	<input type="checkbox"/>
Project Name:				
Scope of Work:				
Project Address:				
	Street	Building	Suite	Zip Code
Number of Plans Submitted:		Number of Pages:		

B. Suppression System Contractor Information (Required):				
Licensed Suppression System Contractor Requesting Permit:				
COSA I.D. Number:		General Contractor:		
Contractor Address:				
	Street	City	State	Zip Code
Company Registration Number:		Expiration Date:		
Business Phone #:	() -	Fax#:	() -	
Point of Contact/Licensee Information (Required): (If Contact/Licensee is a new to the system, please fill in all information. If the Contact/licensee already exists, provide name, ID, and license number and update any required information.)				
Applicant's Name:				
Applicant's Position/Title:				
Day Phone #:	() -	Mobile Phone #:	() -	
Fax #:	() -	Email:		

C. For SAFD Use Only:			
A/P#:		Permit Date:	

D. Building Information (Required):	
*Number of Floors:	
Check the appropriate line below if this work is associated with any of the following types of work. List the City of San Antonio Building Permit Number. (Check one – Required):	
<u>COSA DSD A/P#</u>	
<input type="checkbox"/>	New Building(s)
<input type="checkbox"/>	Building Addition(s)
<input type="checkbox"/>	Building Renovation(s)
<input type="checkbox"/>	Suppression Work Only
	N/A

E. Gaseous Suppression System Details: (Check and fill in all fields that apply – Required):						
System Type						
Engineered System <input type="checkbox"/>			Listed Pre-Engineered System <input type="checkbox"/>			
Number of Protected Areas	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Name of Protected Areas						
Area 1		Area 3		Area 5		
Area 2		Area 4		Area 6		
Number of Suppression Systems	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Suppression Agent (From NFPA 2001, 2008 Edition)						
System 1		System 3		System 5		
System 2		System 4		System 6		
Tank Number / Tank Capacity (In Pounds)						
System 1	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity
System 2	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity
System 3	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity
System 4	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity
System 5	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity
System 6	Tank No.	Capacity	Tank No.	Capacity	Tank No.	Capacity

F. Reference Codes and Standards: (Check All That Apply - Required)	
<input type="checkbox"/>	International Building Code, 2015 Edition
<input type="checkbox"/>	International Fire Code, 2015 Edition
<input type="checkbox"/>	National Fire Alarm and Signaling Code - (NFPA 72), 2013 Edition
<input type="checkbox"/>	National Electrical Code - (NFPA 70), 2014 Edition
<input type="checkbox"/>	Standard on Clean Agent Fire Extinguishing Systems - (NFPA 2001), 2015 Edition
<input type="checkbox"/>	Other(s):

G. Checklist for Plans Submittal:

The following information lists the basic plans submittal requirements for applicable COSA departments to complete their plans review. Mark “REQ” when the item is required and included in your submittal; mark “N/A” when the item is not applicable to your project. All other items are required. This checklist is to be completed by the applicant (see Section B) in its entirety.

1. General:

REQ: <input type="checkbox"/>	NA: <input type="checkbox"/>	a. Code Modification Requests (CMR) and/or Approved Alternative Method designs - If design is based on an approved CMR
REQ: <input type="checkbox"/>	NA: <input type="checkbox"/>	b. Preliminary Code Review Design Meeting correspondence. Include a copy of the approved correspondence regarding any Preliminary Code Review Design Meetings applicable to this project.
REQ: <input type="checkbox"/>	NA: <input type="checkbox"/>	c. All plans (i.e., each sheet) are to be signed by the Type PL licensee for the installing contractor with the Type PL licensing information and company name. Note that Type PL licensee’s signature is to be updated for each revision submitted to the City on each revised sheet. Note that this requirement applies to non-pre-engineered systems only.
REQ: <input type="checkbox"/>		d. All plans (i.e., each sheet) are to be signed by the A.P.S. for the installing contractor with the A.P.S.’s licensing information and company name. Note that A.P.S.’s signature is to be updated for each revision submitted to the City on each revised sheet. Note that this requirement applies to the fire alarm equipment plans and calculations only.

2. Engineered Systems: (Submittal Books)

REQ: <input type="checkbox"/>	a. Table of Contents
REQ: <input type="checkbox"/>	b. Bill of Materials
REQ: <input type="checkbox"/>	c. Equipment data sheets for all fire alarm equipment to include releasing panel, smoke and heat detectors, manual fire alarm boxes (pull stations), duct mounted smoke detectors, interface devices to include control, monitor, and signaling modules; notification appliances, single or multi-voltage relays, and electrical cabling.
REQ: <input type="checkbox"/>	d. Equipment data sheets for all clean agent system components to include agent containers, distribution piping, pipe fittings, nozzles, solenoids, and extinguishing agent.
REQ: <input type="checkbox"/>	e. Nozzle data to include size, orifice port configuration, flow rate, and equivalent orifice area if not included in the equipment data sheet for the proposed nozzle.
REQ: <input type="checkbox"/>	f. Standby battery calculations for all control equipment.
REQ: <input type="checkbox"/>	g. Standby battery calculations for air sampling type smoke detector power supplies if installed.
REQ: <input type="checkbox"/>	h. Installation data packs for air sampling type smoke detectors if installed.
REQ: <input type="checkbox"/>	i. Voltage drop calculations for all notification appliance circuits.
REQ: <input type="checkbox"/>	j. Enclosure volume calculations.
REQ: <input type="checkbox"/>	k. Agent weight calculations to include design extinguishing or inerting concentration.
REQ: <input type="checkbox"/>	l. Maximum positive and maximum negative pressure relative to ambient pressure expected to be developed upon agent discharge estimate.

3. Pre-Engineered and Engineered Systems: (Working Plans)

REQ: <input type="checkbox"/>	a. Name of owner and occupant.
REQ: <input type="checkbox"/>	b. Location including street address and suite number if applicable.
REQ: <input type="checkbox"/>	c. Point of compass.
REQ: <input type="checkbox"/>	d. Location and construction of protected enclosure walls and partitions.
REQ: <input type="checkbox"/>	e. Location of fire walls.
REQ: <input type="checkbox"/>	f. Dimensioned enclosure cross section full height or schematic diagram, which includes the location and construction of floor / ceiling assemblies above and below, raised access floor, and suspended ceiling.
REQ: <input type="checkbox"/>	g. Description of occupancies and hazards being protected to include designation of whether or not the enclosure is normally occupied.
REQ: <input type="checkbox"/>	h. Description of exposures surrounding the enclosure.
REQ: <input type="checkbox"/>	i. Dimensioned plan view of protected area showing enclosure partitions (full or partial height): agent distribution system including storage containers, piping, nozzles, pipe support and hangar locations, and location of controlled devices (dampers and shutters), and location of instructional signage stamped and signed by the Type PL licensee.
REQ: <input type="checkbox"/>	j. Isometric view of the agent distribution system showing length and diameter of pipe segments, node reference numbers, fittings including reducers and strainers, tee orientation, and nozzles including size stamped and signed by the Type PL licensee.
REQ: <input type="checkbox"/>	k. Equipment legend for suppression system equipment including agent containers and nozzles placed on each sheet of the plan view of the protected area and distribution system.
REQ: <input type="checkbox"/>	l. Rigid pipe support and securement, agent container securement, and pipe hangar details.
REQ: <input type="checkbox"/>	m. Instructional signage details.
REQ: <input type="checkbox"/>	n. Step by step sequence of operation either as a written description or an input / output matrix.
REQ: <input type="checkbox"/>	o. Plan view of protected area showing placement of all control equipment, fire alarm initiating devices, notification appliances and system interface devices to include effective intensity settings for notification appliances, schematic wiring interconnection between all devices, and end of line device locations, signed by the Fire Alarm Planning Superintendent.
REQ: <input type="checkbox"/>	p. Equipment legend for all fire alarm system equipment placed on each sheet of the plan view of the fire alarm equipment placement.
REQ: <input type="checkbox"/>	q. Cabling legend for all fire alarm system equipment placed on each sheet of the plan view of the fire alarm equipment placement.
REQ: <input type="checkbox"/>	r. Detector, manual actuation, and notification appliance mounting method details.
REQ: <input type="checkbox"/>	s. Point to point wiring diagram showing all circuit connections to the system control panel for all initiating, notification, and system interface devices; and the interconnection to the building fire alarm system where a building system is installed.

4. Pre-Engineered Systems (Submittal Books)

REQ: <input type="checkbox"/>	a. All items required in the submittal books for engineered systems (See Section F, Subsection 2) with the exception of Item e (Nozzle Data)
REQ: <input type="checkbox"/>	b. One (1) copy of the listed pre-engineered system design and installation manual.

H. Expiration of Plan Review:

An application for a permit for any proposed work or operations shall be deemed to have been abandoned six (6) months after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the fire code official is authorized to grant one or more extensions of time for additional periods not exceeding ninety (90) days each if there is reasonable cause. (2009 IFC Section 105.2.3)

I. Certification: (Required)

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified or not. The granting of a permit does not presume to violate or cancel the provisions of any other state or local law regulating constitution or the performance of construction. I also understand that the installation of any of the work related to this permit application shall not proceed until approved plans are issued from the City of San Antonio.

Signature:		Date:	
Print Name:			