

IV. STANDARDS

Introduction

Tenant construction at PA airports must comply with applicable Federal and State laws and regulations, local Building Codes, and the PA airport Design and Policy Standards. Design and construction document reviews by the PA will be made based on compliance with these Laws, Codes, and Standards. This section identifies reference materials, available PA design standards and airport-specific design guidelines and requirements.

Please note that other than the “PA Aviation Department TAA Procedures and Standards Guide”, the “Tenant Construction Review Manual”, the “Airport Standards Manual” and the “Sign & Wayfinding Standards”, no request for any standards, guidelines or reference materials identified herein as available through the TFO, will be entertained until the Tenant has reached a business agreement with the airport Property Development and Management Division.

A. PA Standards and Applicable Codes

1. **Tenant Construction Review Manual** – The PA has set forth standards and applicable code requirements in its “Tenant Construction Review Manual” (TCRM). The TCRM has been prepared to present the technical criteria to be followed by Tenants and their A/E consultants during design of the project as well as indicate the general scope of reviews of design documents (plans, specifications, calculations and other documentation), which are submitted to the PA for review. This Manual is available from the Tenant Liaison Office for use by Tenants and their A/Es.
2. **PA Engineering Standard Details and Specifications** – are available for use, and in specific cases are required to be used, by Tenants in construction projects at the airports. If used, the Tenant’s A/E is responsible to assure that the detail or specification is correct and appropriate for the proposed application. When documents are signed and sealed containing these details or specifications, the responsibility becomes that of the A/E of Record.
 - a) **Civil Engineering Standard Details** for civil construction are available for civil design by Tenants. The Index of details is shown in Figure IV-1 and the individual details are available from the Tenant Liaison Office upon request.*
 - b) **Electrical Engineering Standard Details** for electrical construction are applicable for electrical construction by Tenants. The Index of Details is listed below and the individual details are available from the Tenant Liaison Office upon request.*

PA Engineering Electrical Standard Detail Index:

Electrical and Communications Handhole Standard Details
Electrical Manhole Standard Details
Standard Ductbank Details

- c) **PA Standard Specifications** are available for work being specified by Tenant A/Es. The Index of available specifications is shown in Figure IV-3 and the individual sections are available from the TFO upon request.*

**The TFO will issue only PA standard details and specifications which are relevant to the Tenant TAA project, when requested by the Tenant.*

3. **Airport Standards Manual** – In an effort to improve the overall quality of services offered at the Airports regardless of who provides the services, the PA has set forth standards and applicable requirements in its “Airport Standards Manual” (ASM). The ASM has been prepared to present a customer’s point of view the criteria to be considered and followed by Tenants and their A/E consultants during the design of the project. In their day to day work, Tenants and their A/E consultants staffs are expected to adhere to all applicable standards as contained in the ASM, consisting of;
- a) Customer Service,
 - b) Signing & Wayfinding, and
 - c) Planning & Design for Terminals & Facilities

The ASM should be employed along with the Tenant Construction Review Manual and the PA Engineering Standard Details and Specifications.

The following subsections contain Standards, Policies and Guidelines of the PA Airports and apply to Tenant Construction at the Airports. These are in addition to those contained in the Tenant Construction Review Manual.

B. Airport Construction

1. **Industrialized Trailers and/or Modular Buildings** When provided as temporary use in support of a particular construction project, shall be located at least 50 feet or more from the construction work and any other permanent structure. Submission of design drawings and specifications may be waived at the discretion of the TFO for stand alone units provided they meet the fire safety requirements a.) through f.) that are listed below. These units shall be removed promptly at the completion of the permanent construction.

For all other use and installations, either temporary or permanent, a full review shall be conducted for compliance with pertinent functional occupancy

requirements. In New Jersey, when a certificate issued by a NJ State approved Evaluation Agency for Industrialized/Modular Building is provided, submission of the design drawings and specifications may be waived.

For all trailer or industrialized / modular buildings, the following fire and life safety devices shall be installed or provided:

- a.) Smoke detection throughout.
- b.) Manual fire alarm pull stations at each exit door.
- c.) Fire alarm strobes/horns
- d.) Fire extinguishers throughout.
- e.) Emergency lighting for occupancy other than storage.
- f.) Exit signage for occupancy other than storage.
- g.) All alarms shall be transmitted, similar to other building alarms, to the PA Police desk and/or central station.

Any trailer located within 50 feet of a building or elevated roadway is to be provided with a fire suppression system with associated alarms. Trailers are prohibited from being located under roadways and /or abutments. Additional fire rated construction may be required based on separation distances from permanent construction based on building code requirements.

For **trailer complexes**, a main fire alarm panel may be provided to connect all trailer smoke detectors, and manual pull stations would only be required at the main entrances/exits for the complex. Exterior audible and visual devices would then be required on each trailer for identification for emergency responders.

2. **Construction Screening** – All construction work exterior and interior shall be appropriately screened for the protection of the public and shall be constructed with durable materials and finished in a manner which is visibly attractive to the public. Screening shall comply with all applicable standards of the ASM. The tenant shall include proposed barrier design (finish for interior work, and/or screening design for exterior work) and location in their construction documents for review and approval by the PA.
3. **Construction signs** shall be limited to project identification with an artists rendering of the building, names of owner, consultants, and principal contractors thereon. Separate company advertising signs are not permitted.
4. **Staging Plans** – The tenant's A/E shall include staging plans in the construction documents for each stage of construction identifying any changes in passenger or public flow routing. The Construction general conditions must include language that a detailed contractor phasing plan is required to address maintenance of traffic, passenger flow, safety, and equipment staging.
5. **Work Hours** – Work hours may be restricted in certain areas throughout the Airport. It is recommended that the Tenant confirm work hours with the PA

(TFO) during the design phase of the project and reaffirm with the REO at the Pre-Construction meeting.

Note: Additional policies regarding construction activities is found in Section III-C.

6. **Field Design Changes** – Any field design changes made during construction shall be made on contract drawings and should be documented.

C. Aeronautical Operations

1. **Airport Operations and Conditions** – The Tenant's A/E shall include appropriate specification language in the construction documents for work on the airside requiring compliance with FAA requirements. The PA has a guide specification for Airport Rules and Regulations available through the TFO for Tenant A/Es to use regarding construction operations in airside and aircraft operating areas.
2. **Construction Safety and Phasing Plan** - Tenants are required to submit a Construction Safety and Phasing plan for construction projects in the Aeronautical Operations Areas and for projects that receive funds under the FAA funded programs. A template for the Construction Safety & Phasing Plan is available from the REO. The template must be submitted to the REO for approval prior to start of Construction. Other tenant requirements include:
 - a. Provide a point of contact to coordinate an immediate response for any construction-related activity.
 - b. Ensure that no tenant or construction employees, employees of subcontractors or suppliers, or any other persons enter any part of the AOA from the construction site unless authorized.
 - c. Restrict movement of construction vehicles to construction areas by flagging and barricading or erecting temporary fencing.
3. **Aircraft Maneuvering** – An aircraft maneuvering diagram shall be submitted as part of the Tenant's Initial Layout or Conceptual Plan submission which demonstrates that aircraft are able to turn within their own site lease area and identify points where the aircraft can leave the site under their own power in a forward direction.
4. **Taxiway Clearances** – Any Tenant work in an aeronautical area adjacent to an active taxiway will be reviewed by the PA and the Tenant will be given directions regarding which restrictions shall apply.
5. **Wing tip clearances** between parked Aircraft, moving Aircraft and other fixed objects within tenant leaseholds shall meet applicable FAA criteria and will be reviewed by PA.

6. **Aircraft Blast Protection** – Tenant planning shall consider the blast effect of aircraft exhaust on surrounding areas or public roads. Blast protection, if needed, shall be included in the Tenant’s project design.
7. **Obstruction lighting** of facilities shall be reviewed by the PA, using FAA standards. The PA will determine if obstruction lighting of the proposed facility is required.
8. **Aeronautical Obstructions** - All tenants’ work shall be reviewed for potential aeronautical obstruction – Part 775 Surfaces, ATCT Sight Lines - and other aeronautical safety requirements.
– At JFK, air traffic control tower sight lines shall be measured from elevation “Ø” at the inner face of Taxiway “A”.

D. Terminal Operations

1. **Work in Passenger Terminals** – Tenant construction work in all passenger terminals should be planned to minimize impact to the traveling public or interfere with other Tenant operations and comply with all applicable sections of the ASM in effect at the time the work is performed. The PA may require that work be done at night, during off-hours or may enforce restricted work hours, particularly in the CTA. The proposed hours of contract work should be submitted with the Alteration Application. The Tenant is encouraged during design development to verify with the TFO that restricted hours apply to their project.
2. **Protection of Passengers/Public Areas** – Passenger/public vehicular and pedestrian traffic ways and crossing lanes shall be maintained and protected with clean, unbuttered jersey barriers and/or appropriate vertical protection in the case of overhead work.
3. **Construction Screening in Terminals** – Construction areas in passenger terminals must be visually screened from view by the public with decorative finishes.
4. **Noise Control** – The contractor must abide by the airport’s operational restrictions on noise in passenger terminal buildings. This may include confining work to certain times of the day.
5. **Curbside Impacts** – When the proposed project impacts curbside traffic, ground transportation, or involves construction staging areas, a Conceptual Staging meeting shall be requested via the Tenant Liaison Office.

E. Utility Services

1. **Utility Manholes** – Access to PA utility and service manholes by Tenant contractors shall be coordinated through the TFO during design development and through the REO during construction. The Maintenance Services Division will provide access upon request.

All manhole covers and frames permanently removed in the process of construction shall be delivered to the Maintenance Services Division by the Tenant's contractor as directed by the REO.

2. **Water Supply** – For fire suppression systems, it should be noted that low static pressure may be experienced in Water Supply systems under high consumption conditions, such as during hot summer days, July or August afternoons. It is recommended that actual readings including flow rates and residual pressures be taken at the time of design. Sprinkler system or other fire protection designs should be based on such low static pressures. For example:

JFK – Low Pressure Zone	55 psi
JFK – High Pressure Zone	110 psi
LGA – Low Pressure Zone (NYC)	50 psi
LGA – High Pressure Zone (PA pumps)	110 psi
EWR – Low Pressure Zone (Newark, North End)	50 psi
EWR – High Pressure Zone (PA pumps, North End)	120 psi
EWR – Intermediate Zone (Terminals area)	100 psi
EWR – Fuel Farm System (pumps)	100 psi

3. Electrical Service

- a) For JFK & LGA, electric meters for Tenant facilities are provided and installed by the PA Maintenance Services Division. Meter boxes are installed on panels, which are to be provided and installed by the Tenant's contractor in accordance with the Tenant Construction Review Manual.
- b) Tenant Construction at JFK involving electrical service for large new facilities shall comply with the following requirements. Incoming electrical service for JFK is at 4.16kv, with a minimum of 2 feeders provided for each location to provide back-up service in case of a feeder outage, as shown in Diagrams I. and II., below. Incoming feeders shall terminate in a S&C automatic transfer switch, shown schematically in Diagram III., below. Automatic Transfer Switches shall be rated 270MVA and be furnished with mechanical interlocks to prevent more than two switches

(main and tie) to be closed at any time, and with key interlocks for the ground switch. Grounding key interlock system shall match the procedure present at the airport substations. Each incoming feeder shall be copper conductor, EPR insulated, flat-strap and with an overall jacket – minimum size feeders shall be 350 MCM, with a 4/0 tap.

The following JFK Electrical Diagrams are available from the JFK TFO, as needed:

- I. Power Distribution System, JFK International Airport
- II. Typical Network Substation, JFK International Airport
- III. Typical Double-Ended Substation, JFK International Airport

- c) Electrical service for work at LGA and for small projects at JFK, both new and rehabilitation, shall be coordinated through the TFO. This includes information for electrical design, as needed.
 - d) Electrical service, including meters, for EWR and TEB is provided by PSE&G, which is to be contacted for connection requirements. For work in the three passenger terminals, the building power supply should be used – to be arranged by the building manager, through the TFO. If in a multiple tenant facility at EWR, TFO and the Properties Division should be contacted – a joint meter may be used.
 - e) For work at or near the EWR AirTrain, the main power feed is supplied by two primary PSE&G feeders that deliver power to the Central Substation at 27kv. At the Central Substation the power is stepped down at 13.2kv and distributed to the 5 utilization substations. At these locations the power is stepped down to 660 volts AC and distributed to the vehicles along the guideway via power rails.
 - f) All new lighting systems should be designed to meet ASHRAE/IES 90.1 – 1999; New Jersey Uniform Construction Code, Section 5:23-3.18; and Energy Conservation Construction Code of New York State, Section 805 building energy guidelines.
4. **Communications Infrastructure** – Although involving telecommunications systems shall comply with the following:
- a) No existing telecommunication cable shall be cut, moved or otherwise tampered with, until written approval is provided by the PA.
 - b) If construction affects existing telecommunications cable, the tenant is liable for all costs for relocating or repairing the cable and conduit.

- c) **Tenants may not use space in existing communications rooms, unless prior written consent is obtained from the PA.**
- d) PVC conduit is prohibited within buildings. However, PVC insulated wire and cable is permitted, provided that it is designed and constructed in accordance with applicable codes and standards.

5. Fire Alarms

It is suggested that conference be held, early in the design phase of the project involving the Tenant, it's A/E, the airport Fire Marshal and the TFO to agree on zoning and options for alarm reporting (individual alarms or a central graphics annunciator). Any facility – specific requirements will be discussed at that meeting.

- a) All alarms must sound at the airport Police Fire Board. For JFK and LGA, the final hook-up is accomplished by the airport's Maintenance Division Services Electrical Section. This hook-up is coordinated through the REO. For EWR, the hook-up is performed by a PA service contractor, arranged through the REO. For TEB, the hook-up is accomplished by the contractor to the central alarm board in the Operations Building.
- b) At JFK and EWR, the Tenant shall request fire alarm "code wheel" assignments by a letter to the TFO. The request shall indicate the type, number and location of devices to be reported (i.e. pull boxes, smoke detectors, water flow devices, etc.) The TFO reviews the proposed zoning and assigns "code wheel" numbers. At LGA, addressable systems compatible with the existing fiber optic loop shall be used. If an annunciator panel is provided, the number of individual lines to the police desk may be reduced significantly, but the annunciator panel must be located in a 24-hour accessible location to which the responding fire unit can easily gain access. A graphic annunciator is preferred by the PA, particularly in large facilities.
- c) Municipal street side fire alarm boxes shall be in accordance with the Tenant Construction Review Manual, Fire Protection Section 12.

6. HVAC Systems – Alterations involving HVAC systems shall comply with the following requirements:

- a) Installed Package Chiller/Heater Units using domestic water supply for such reasons, as humidification must have durable signage affixed indicating location of major isolation valves.

- b) Installed Package Chiller/Heater Unit's condensate drains must have durable signs affixed indicating location of the termination points of such drains.
- c) Condensate lines must be copper and not less than 1" in diameter and have clean out plugs installed at each change in direction in order to provide access for removal of blockages.
- d) Condensate lines installed above hung ceilings must be insulated to prevent ceiling tile staining caused by condensation dripping from the line.
- e) Termination points of HVAC Unit(s) condensate drains at sinks and/or floor drains shall have durable signs affixed to them indicating the nature of source locations of the water's origination. This requirement is most important when the source and termination points are remote from one another.
- f) Alterations of Central Heating Hot Water distribution system involving major shut-down and long term unavailability of such systems are only permissible during the period of May 15th through October 15th.
- g) Alterations of Central Cooling/Chilled Water Distribution systems involving major shutdown and long term unavailability of such system are only permissible during the period of October 15th through May 15th.
- h) One reproducible copy of "As Built" mechanical system drawings and Operation and Maintenance Manuals, including specifications and manufacturer's O&M Instructions shall be delivered to the REO for the airport's HVAC Section, attention, Chief Maintenance Supervisor for facility recorder retention.
- i) Outdoor air supply intake and exhaust openings for HVAC equipment serving the terminal buildings, if located on the ramp side, shall be not less than 10 ft. above the grade level of the ramp and shall be at least 50 ft. from any point of flammable vapor release, as required by NFPA 415.
- j) For New York airports, ventilation calculations shall be submitted to substantiate that the outdoor air provided meets the minimum ventilation requirement, as required by NYC Building Code. It shall include listing of each room/space in the scope area, with calculations of room volume, numbers of occupants, minimum air requirements and actual air designed. All air quantities shall be presented in both forms of cfm per sf and total cfm. For New Jersey airports, provide a ventilation calculation to substantiate that the minimum outdoor air provided meets the ventilation requirement as indicated in the International Mechanical Code

(IMC)/2003, as amended by N.J.A.C. 5:23-3.20. Show on the plan how outdoor air is supplied to the space.

- k) For New York airports, those spaces that are not served with existing base building smoke exhaust systems, provide complete smoke exhaust calculations to substantiate that the tenant installed smoke control systems will exhaust the air at the rate of at least six (6) air changes or 1.0 CFM per square foot, whichever is greater, as required by NYC Building Code.
 - l) Fire damper, smoke damper, and combination fire & smoke damper installations, both existing and proposed, must be clearly indicated on the drawings. Damper specifications, MEA or BS&A approval numbers (for New York airports,) and installation details shall also be provided.
 - m) For New York airports, the manufacturer's certifications for all tenant proprietary HVAC systems must be submitted to substantiate that they meets the minimum energy efficiency requirements, as indicated in the 2002 Energy Conservation Construction Code of New York State.
7. **JFK COGEN Services** – JFK Tenants developing facilities in the Central Terminal Area (CTA) are obligated to utilize the chilled water and medium temperature hot water services from the JFK COGEN Facility and may not install any separate air cooling or heating equipment, unless it is deemed by JFK COGEN that their lines are too far away or if need is above 2 tons in which case written consent will be given by JFK COGEN, (NEED NOTES FROM JFK FOR PA AGREEMENT)

F. Environmental Standards

1. Asbestos Requirements

- a) Tenants are required to survey the proposed project area for the presence of asbestos using a licensed professional licensed by the NY State Department of Labor (NY-DOL) for NY facilities and a AHERA certified Asbestos Inspector licensed by the Department of Labor Asbestos Division for NJ facilities.
- b) If upon the initial survey, it is evident that asbestos is present, it must be abated in accordance with applicable Federal, State, and PA regulations. For New York work, Industrial Code Rule 56 regulations are applicable. For New Jersey work, the NJ Department of Community Affairs Subchapter 8 regulations apply. The Tenant is required to develop an abatement plan and abate cited areas. An abatement plan consists of detail drawings and work procedures. Plans for NY projects shall be prepared and signed by a NYSDOL-certified asbestos project designer

and for NJ projects by an AHERA-certified designer. A guide entitled “For Contract Preparation or Plan Review Purposes, An Abatement Project Can Be Separated Into Three Categories I) Certifications, II) Drawings, III) Procedures” is available from the TFO and should be used as a guide in developing asbestos abatement contract documents.

- c) The asbestos certification, issued by a the licensed asbestos consultant, and will indicate one of three asbestos situations:
 - 1) If the prior asbestos survey by the Tenant has determined that no asbestos containing material (ACM) is present or will be disturbed, Certification Form PA-3677 (Part One) shall be submitted (Figure V-7), together with a plan showing locations of the survey areas.
 - 2) There is a substantial presence of ACM, which requires a submission of a detailed asbestos abatement plan for review and approval. The Tenant shall complete Forms PA-3677 Part Two (Figure V-8), PA-3678 (Figure V-9), and PA-3679 (Figure V-10) and submit a separate TAA Form, PA-531, for the abatement program. For large complex projects, a prior Conceptual Submittal and separate asbestos abatement TAA, Form 531, should have been submitted for the abatement program.
 - 3) Once the abatement work has been completed, copies of the final compliance report will be required prior to the start of construction work. (Refer to the requirements in Section III – Construction Process for closeout requirements for asbestos abatement construction).
- d) Asbestos abatement projects may be handled as a separate TAA and must follow the same TAA process with respect to review and approval. It should be noted that a TAA project design review can be concurrent with asbestos abatement design and implementation.

ASBESTOS ABATEMENT WORK PLANS MUST BE APPROVED BY THE PA THROUGH THE MANAGER, AIRPORT FACILITIES, PRIOR TO THE START OF ANY WORK.

2. Lead Abatement

The PA requires all contractors to comply with State and Federal laws regarding lead containment, removal and disposal. Tenants are required to survey the proposed project area for the presence/absence of lead-based paint (LBP), using a professional licensed by a regulatory agency for lead inspections, or assume that there is LBP present. If lead abatement is to be performed, a Health and Safety Plan prepared and signed by a Certified Industrial Hygienist, shall be submitted for approval. A guide entitled “Lead Management Program has been

developed outlining guidelines for preparing contract requirements dealing with lead, lead paint, and other lead containing materials. Copies are available from the TFO for Tenant A/E's use".

3. **Soil Excavation** – Tenants must include provisions to address excavated soil. The disposal or reuse of excavated soil is the responsibility of the Tenant. The following are the only alternatives that are permitted under State regulations:
 - a) Use the excavated soil as backfill in the original excavation.
 - b) Apply to the State Regulatory Agency to beneficially reuse the excavated soil in areas outside of the original excavation. (Note - to reuse excavated soil on Port Authority property, the Tenant must first get the written approval from the Port Authority prior to submitting a beneficial reuse application to the State Regulatory Agency). Soil shall not be removed offsite without written approval from the Port Authority. In order to obtain approval, the tenant will be required to submit to the Port Authority the Beneficial reuse application and the State approval letter.
 - c) Transport the soil to a disposal Facility permitted by the State from which it operates to accept such material. Soil shall not be removed offsite without written approval from the Port Authority. In order to obtain approval, the tenant will be required to submit a copy of the permit from the intended disposal facility, an acceptance letter from the disposal facility and all soil sample results related to the excavated material.
4. **Dewatering**– De-Watering during construction must be coordinated with the PA Environmental Services Unit, through the TFO. The tenant is responsible for obtaining all required permits. In Queens and Brooklyn, a Long Island Well Permit (“dewatering permit”) is required if groundwater is pumped at a rate of 45 gpm or more (cumulative). Discharge of dewatering effluent must meet airport SPDES/NJDES permit limits. Permit applications are to be submitted with the TAA.
5. **Storm Water Discharge**- Construction activities that disturb 1 acre or more requires an authorization from NYSDEC/NJDEP to discharge during construction under the Storm Water Construction Permit and a soil erosion and sediment control plan certification. A Storm Water Pollution Prevention Plan (SPPP) is required for construction activities and for post-construction discharges. A soil erosion and sediment control plan is the main component of the SPPP. Post-construction storm water runoff must be treated to remove at least 80% TSS (total suspended solids).

6. **Air Emissions** – The Tenant is required to obtain permits to construct and certificates to operate for all air emissions sources, as per NYSDEC/NJDEP. Boilers, hot heaters and generators are typical emissions sources. The tenant should consult NYSDEC/NJDEP regulations to determine what equipment requires permits. Permit applications should be submitted with the TAA.
7. **Wetlands and Surface Waters**- Work adjacent to or in these areas requires environmental permits. Typically, six months are required for NYSDEC/NJDEP review. The permits are to be issued in the tenant's name. The Port Authority signs the application as "property owner" only.
8. **Construction Permits**- DOT permits are required for vehicular or pedestrian lane closures (off-airport only). The tenant is responsible for obtaining these permits. MPT (maintenance and protection of traffic) drawings and applications should be submitted with the TAA.
9. **Other Permits**- The tenant is required to obtain any and all other permits (e.g. water taps, sewer connections). Copies of all permit applications should be submitted with the TAA.
10. **Corrosion Control**- The Tenant must provide provisions in construction contracts for evaluation of requirements for corrosion control for all proposed facilities that will carry or store hazardous substances, in conformance with U.S. EPA, New Jersey Department of Environmental Protection (NJ DEP) for New Jersey airports and New York State Department of Environmental Conservation (NYS DEC) for New York airports.
11. **Bulk Petroleum and Hazardous Substance Storage Tanks**- The PA requires the Tenant to register with the State as the "owner/operator" of all tanks on their leasehold that will be used to store petroleum, other hazardous substances or mixtures of hazardous substances, unless otherwise specified in the lease agreement or not subject to State or Federal regulations. The Tenant shall submit to the PA through the TFO a copy of each tank registration certificate that it obtains from the NYDEC or NJDEP, as well as subsequent renewed registration certificates during the Tenant's lease period.
12. **Health and Safety Plans (HASPs)** – Most construction projects require a HASP prepared by the Contractor. The HASP must be signed by a Certified Industrial Hygienist (CIH) and submitted to the PA for review.
13. **Environmental Permits** – Copies for all environmental permits (underground tank registrations, dewatering permits, etc.) must be submitted with the TAA or as soon as possible after they are obtained. The PA is not to be named on the permit unless permission is obtained in advance from the Manager, Airport Facilities Division.

14. NYC Department of Health Approvals for JFK and LGA Food Facilities –

The following are established guidelines to obtain the necessary NYC Department of Health (NYCDH) operating permits for Tenants having food handling and/or preparation functions on their premises:

- a) Contract documents, including specifications and drawings, are to be submitted by the Tenant as part of the standard PA Tenant Alteration Application review procedure.
- b) Subsequent to the resolution of all PA Rider comments and PA facility final inspection by the Resident Engineer (REO), the Tenant will submit to the TFO a PA approved set of contract drawings accompanied by the Tenant's A/E certification and a copy of the REO's Final Inspection check list and recommendation for occupancy.
- c) For approval of a change in a Tenant Food Establishment owner/operator, where the Tenant plans to use the existing space as-is, (without increasing the seating capacity or performing major construction or alteration work) construction documents approved for the previous Tenant or updated drawings accurately describing the minor design changes to the premises can be used in obtaining approval. The Tenant may then submit these approved documents with the permit application to the NYCDH for processing.

NOTE: The Tenant is responsible for acquiring existing documents from the previous owner/operator.

15. Health Approvals for NJ Food Facilities – For EWR, NJ Sanitary Services Unit will inspect the premises and provide the permit. For TEB, the local jurisdiction shall apply.

G. Fueling Systems

1. **Underground Fuel Storage Tanks (UST)** – It is PA Policy that no underground storage tanks be left abandoned whether it be a replacement program or new construction. For New York, when installing USTs the New York Fire Code takes precedence over the New York Building Code. For New Jersey, NFPA 30 rules apply.

All underground storage tanks at Port Authority airports shall be installed, operated and maintained in accordance with appropriate state and federal regulations. Sources that should be reviewed to determine appropriate requirements include 40 CFR Part 280 for Federal requirements, NJAC 7:14B for New Jersey's program and 6 NYCRR parts 612, 613 and 614 for New York.

2. **Aboveground Fuel Storage Tanks (AST)** – For New Jersey Airports – Aboveground tanks for the storage of motor fuels in fuel dispensing systems are permitted only on premises to which the public does not have access. See BOCA Fire Prevention Code F-3207.5. The tanks and their installations must satisfy the requirements of NFPA 30A. Also, tank enclosure/screen wall must provide vehicle impact resistance and protection and all new aboveground fuel storage tanks must have cathodic protection (CP) for the bottoms in contact with soil. The system shall be compatible with and coordinated with the existing CP systems at the airport.
3. **Aboveground Fuel Storage Tanks (AST)** – For New York Airports – The Fire Department – City of New York (FDNY), Bureau of Fire Prevention, does not object to granting a variance for specified locations at our NYC airports for AST installations, provided the following conditions are met:
 - a. The PA shall perform periodic safety inspections of all fueling facilities and shall have a trained fire brigade available to respond in the event of an emergency at all times. Further, each tenant shall apply and secure a Fire Department operating permit for storage and dispensing of motor fuel.
 - b. Detailed installation drawings shall be filed with the Bureau for examination and approval. The drawings shall show the type and location of the tank installation. A 150 foot radius plot plan showing all exposures shall be included in the drawings.
 - c. All tanks shall be of a complete double shell and shall have UL 2085 listing. Tanks shall be designed to withstand 20 psig hydrostatic test pressure. Tanks used for storage of gasoline shall be provided with a CARB approved Stage I & II vapor recovery system.
 - d. All tanks shall be equipped with all overfill safety equipment and devices including anti-siphon valve, overfill containment and catchment basin, visible and audible high level alarm system and a continuous leak detection and monitoring system.
 - e. Fixed automatic dry chemical extinguishing system protecting the off loading pumps, off loading areas, dispensing pumps and dispensing areas shall be provided. Such systems shall be UL listed for outdoor applications. Note that only Pem-All Fire Extinguishing Corp. and Pyro-Chem manufacture UL-Listed and NYC MEA Approved extinguishing systems for automobile service station fueling area protection..
 - f. Filing and dispensing operations shall be conducted under the direct supervision of an individual having Fire Department Certificate of Fitness for motor fuel dispensing.

- g. All new aboveground fuel storage tanks must have cathodic protection (CP) for the bottoms in contact with soil. The system shall be compatible with and coordinated with the existing CP systems at the airport.

4. JFK Hydrant Fueling System

- a. Revise to require installation of a cathodic protection system compatible and coordinated with the existing cathodic protection systems for the fuel transfer pipelines and hydrant fuel piping are required. The use of secondary containment for these piping systems is not recommended
 - b. Prior to construction of other non-fuel utility systems at the airports, the installation environment should be evaluated, by a NACE International Corrosion Specialist, to determine required corrosion control measures to mitigate corrosion that would result from aggressive soils, stray currents, or other outside factors that could result in accelerated corrosion. The appropriate corrosion control measures should be designed and submitted to the Port Authority for review
5. All new underground fuel storage tanks shall conform to the requirements of the following UST regulations with regard to corrosion control:
- a. U.S. Environmental Protection Agency (USEPA) - 40 CFR Part 280
 - b. New Jersey Department of Environmental Protection (NJDEP) - N.J.A.C. 7:14B - Underground Storage of Hazardous Substances (UST) Rules (New Jersey Airports)
 - c. New York Department of Environmental Conservation (NYDEC) – 6 NYCRR, Part 613 – Handling and Storage of Petroleum” (New York Airports)

H. Other PA Standards and Policies

1. **Site Planning** – In developing site layouts for new facilities, the applicant should be aware that building and paving set back limits exist but vary depending on the airport and location within the airport. The main goals of these setbacks are for aesthetic considerations, to retain a feeling of open spaces and for movement for fire equipment around structures and meeting the required local ordinances. General landscaping for the area including plantings for ground cover, screening of elements and for accent shall be planned for the open areas. Appropriate clearances from airside security fencing shall be maintained, however.
2. **Parking** – Parking for Tenant facilities at JFK and LGA shall comply with zoning ordinances of the City of New York and Federal ADA requirements. For EWR and TEB, the applicable BOCA and PA standards govern.

3. **Security fencing** at aeronautical (airside) boundaries shall conform to FAA Advisory Circular #107-1 (8 feet high with 3 strands of barded wire) – Aviation Security Airports. Other security fencing shall be appropriate for the level of security intended.
4. **Exterior building signs** shall comply with the PA Airports Signing Standards Manual. A copy of this Manual is available from the TFO. Any variations to standards shall be submitted to the TFO for approval.

I. CADD Standards

Tenants are encouraged to submit their As-Built Drawing in a CADD format that is compatible with the PA's CADD standards, in order to:

- Facilitate updating of the infrastructure and facilities data base for each airport.
- Promote the exchange of digital information between consultants during the design phase of a project.
- Make more efficient the dissemination of design modifications (revisions) during the construction phase of a project.

The following guidelines apply:

1. basic format = AutoCAD 12, 13, or 14 binary (.dwg)
2. scale = full (i.e., 1:1)
3. media = DC 2120 data cartridges – or 3 ½” high-density floppy disks
4. if used, data must include set of symbol blocks or exploded blocks
5. if compression is needed, use PKZIP compression software

A detailed set of PA CADD Standards can be made available by request through the TFO. It includes a disk to facilitate setting up the appropriate AutoCAD environment.

Figure IV-1

Port Authority Standard Specifications: Electrical:

- 16000 Electrical General Requirements (A Revised 07-20-00)
- 16110 Raceways (P 9026-95)
- 16114 Cable Trays (N 11-6-96)
- 16115 Underground Conduit Systems (N 7013-01)
- 16120 Wires Cables Splices Terminations (600 Volts or less) (P 8-29-00)
- 16121 Wires Cables Splices Terminations (Med V-601 Volts to 34500 V) (N 5-22-03)
- 16127 Control - Signal Transmission Media (P 9-27-95)
- 16128 Arcproofing (N 1-8-01)
- 16129 Taxiway – Runway Wires and Cables (N 7-25-95)
- 16130 Conductor Bars (N 1-25-96)
- 16133 Control Panels Enclosures-Cabinets and Terminal Boxes (P 12-14-95)
- 16135 Boxes and Fittings (P 9-26-95)
- 16140 Wiring Devices (P 9-26-95)
- 16150 Motor Power and Control Wiring (N 11-6-96)
- 16190 Supporting Devices (N 11-6-96)
- 16250 Transfer Switches (P 7-11-03)
- 16315 Medium Voltage Interrupter Switches (P 9-25-90)
- 16316 Medium Voltage Metal-Clad Switchgear (N 11-6-96)
- 16320 Dry-Type Transformers General Purpose – 600 Volts or Less (A)
- 16325 Dry-Type Transformers (Medium Voltage) (N 7-3-96)
- 16326 Cast Coil Dry-Type Transformers (Medium Voltage) (N 7-8-96)
- 16327 Med Voltage Liquid Filled Power Transformers 15 MVA & Smaller-Base Rating (N11-6-96)
- 16335 Low Voltage Switchgear (P 8-7-96)
- 16450 Grounding (N 10-2-96)
- 16452 Electrical Bonding (N 7-13-01)
- 16455 400HZ Output Solid State Frequency Converter for Ground Power System (N 9-21-94)
- 16470 Panelboards (P 11-22-95)
- 16475 Overcurrent Protective Devices (600 Volts or Less) (N 7-13-01)
- 16477 Protective Device Coordination Study (P 9-26-95)
- 16480 Motor Control Centers (P 8-20-93)
- 16527 High Mast Floodlight Systems(N 12-26-96)
- 16541 Airport Elevated Retroreflective Taxiway Edge Markers (A)
- 16542 Taxiway – Runway Light Fixtures (N12-27-96)
- 16549 Airport Constant Current Regulators (A)
- 16550 Roadway Lighting (P 9-29-95)
- 16561 Taxiway and Runway Guidance Signs (N 10-1-96)
- 16620 Diesel-Generator Set (with Auxiliaries) (N 7-9-96)
- 16630 Substation Batteries and Battery Chargers Lead –Acid Batteries (P)
- 16670 Lightning Protection System (N 7-9-96)
- 16720 Fire Alarm Systems (N5-7-97)
- 16858 Electric Heating Cables (N2-7-97)

16859 Electric Heating Cables (Self Limiting Type) (A)
16860 Electric Heaters (P 2-10-97)
16861 Electric Baseboard Heaters (A)
16935 Supervisory Control and Data Acquisition (SCADA) System (N 7-26-95)
16998 Medium Voltage System Commissioning Tests (N 11-6-96)