Industrial, Institutional, and Structural (IIS) Pest Control	
Federal category for commercial applicators	
Are any existing manuals/exams available?	There is no national manual nor any widely adopted version(s). Several states/tribes/territories have their own manuals/exams, and some share with a few neighboring states (i.e. WA/OR).
Research notes: - Anything identified in the AAPCO survey? - What did you find online? - What did you learn contacting others?	AAPCO survey shows two respondents working on (or recently finished) this manual. - Ohio just completed a new manual/exam. (contact Mary Rose **rose.155@osu.edu**): Broken out into 'general' and 'termite') Very pest-driven with some 'bonus' (core) content - California is updating their content now (Alicia Scott at CDPR: **alicia.scott@cdpr.ca.gov**) Broader, with more principles/pests Georgia is using a manual from 1996. Oregon is using a college textbook, ***Truman's Scientific Guide to Pest Control***, wanting to replace it as soon as possible.
How many states/tribes use this category?	All states/tribes/territories use this category because it is federally required. However, there's a great deal of variation in the approach to lumping/splitting this category.
How national, regional, or local is the training material likely to be, for this category? For example, would you expect the training material to be similar in each state, or tailored to local pests/conditions?	Pests associated with human habitat vary from north to south with respect to termites, fire ants, and several other pests. Wildlife pests vary widely from region to region, including more burrowing rodents in the west, more avian nuisance in the northeast. However, some content related to pesticide applications in indoor/sensitive settings is likely to be widely applicable nationwide.
How is the category lumped with other categories and/or split into several categories?	Some certifying authorities lump with structural fumigation and/or public health pest control. Some split out: - Structural pests (WDO) as a category - Moss control (sub-IIS) - Rodent control (sub-IIS) - Wildlife control (sub-IIS) - Termites (sub-IIS) A few lump with right-of-way into a category called "Industrial Weed Management" (MS and OH).
The new competencies are described in 40 CFR Part 171.103(d)(7)	***Industrial, institutional, and structural pest control.*** Applicators must demonstrate a practical knowledge of industrial, institutional, and structural pests, including recognizing those pests and signs of their presence, their habitats, their life cycles, biology, and behavior as it may be relevant to

	problem identification and control. Applicators must demonstrate practical knowledge of types of formulations appropriate for control of industrial, institutional and structural pests, and methods of application that avoid contamination of food, minimize damage to and contamination of areas treated, minimize acute and chronic exposure of people and pets, and minimize environmental impacts of outdoor applications.
Are there emerging regulations or science in this area?	- There have been changes in the registration of pyrethroids that have broad relevance – for example, defining the "crack & crevice" method. - There is new science about older peoples' sensitivity to pesticide exposure, making a new array of sensitive sites. - Communication skills have proven to be essential in preventing pesticide impacts – post-treatment ventilation, accurate directions to residents, and thorough identification of hazards/sensitive sites. - There are new chemistries available and some behavioral avoidance issues identified re: baits. - Resistance-management - Calculating rates of application in a structural setting – cover this more specifically
Are there opportunities to reduce duplication of effort?	Definitely. Several states are looking for updated content before implementation.
Are there critical items or methods needed to ensure accuracy/quality? Are there tripping hazards on the path to adopting the new/revised manual?	Need to involve end-users, trainers, and employers in the process; engage with regulators/enforcement to address real-world exposure scenarios.
Category required for applicators as described in 40 CFR Part 171.103(g)	***Industrial, institutional, and structural pest control.*** This category applies to commercial applicators who use or supervise the use of restricted use pesticides in, on, or around the following: Food handling establishments, packing houses, and food-processing facilities; human dwellings; institutions, such as schools, hospitals and prisons; and industrial establishments, including manufacturing facilities, warehouses, grain elevators, and any other structures and adjacent areas, public or private, for the protection of stored, processed, or manufactured products.
Need or interest for workgroup?	Not at this time.
Interested parties	
Researched/summarized by CTAG member Kaci Buhl	

Summary (1-3 paragraphs): Industrial, Institutional & Structural (IIS)

There is no national manual nor any widely-adopted version(s). This category manual is likely to share significant content across the nation, where interior conditions and pests are similar. However, fire ants and termites represent major differences between the north and south.

- Principles, practices of IIS: all states/tribes/territories
- General pests in buildings, fabrics, food preparation areas: all states/tribes/territories
- Fire ants and termites: Certain southern states

In a recent AAPCO survey, 20% of certifying authorities said they need new or updated training materials for this category, and 43% said they might need updated materials to meet new competency requirements. It ranked 4th in category priorities. Within regions that share similar conditions and pests, states/tribes/territories may benefit from partnering. They should seek out neighboring states/tribes/territories with aligning category(ies).

All states/tribes/territories use this category because it is federally required. However, there's a great deal of variation in the approach to lumping/splitting this category. "Residential," "Structural," and "Institutional" are common terms for this category. This category is often split into smaller categories such as:

- General pest control with breakouts (several states) such as:
    - Termites
    - Indoor plant maintenance
    - Industrial weed control
    - Nuisance wildlife
    - Wood destroying organisms
    - Moss control

This category content is unique because certified applicators in this category have the most frequent and close interactions with the public, including people in schools, daycare centers, eldercare, and hospitals. This presents the greatest number of challenges and opportunities for *risk-reduction by communication*. Indoor settings can also pesticides to persist for much longer periods than outdoor settings. Routine pesticide applications on a schedule are outdated but the approach is still practiced.

For this category, we may need a suite of materials to be shared, including content related to principles/practices/pests (one body of work), content related to termites (one body of work) and content related to fire ants (one body of work). This would allow certifying authorities to mix and match, as needed.