Facilities Development Division California's Building Department for Hospitals

The TIO Program Basics and Recent Changes (Cesar)



Agenda

- Introduction to ISU
- Introduction to the TIO
- Who is Responsible for the TIO
- Approved Agencies
- Special Inspectors
- Special Inspections
- Approval of Special Inspectors



Agenda

- Qualifications of Special Inspectors
- Qualifications of Inspectors of Record
- Summary of Changes to the TIO
- Test and Special Inspection Reports
- Verified Compliance Reports
- Summary



Introduction to the Inspection Services Unit (ISU)



What Is ISU? OSHPD's Inspection Services Unit

- ISU is responsible for oversight of quality assurance of healthcare building construction in California. ISU duties include:
- Administration of the Hospital Inspector Certification Program – testing, certification, and recertification of private-sector construction inspectors.
- Issuance of Construction Observation Bulletins bulletins regarding statewide construction issues.

What Is ISU?

- Technical oversight of work performed by State and certified private-sector hospital construction inspectors.
- Development and administration of programs, policies and regulations related to health facility construction inspection and OSHPD field safety.
- Technical leadership, training, and quality control/quality assurance of OSHPD field staff.



Who are the people of ISU?

INSPECTION SERVICES UNIT

LaBrie, Joseph (RCO)

IOR Exam & Certification

916-440-8316

213-687-4965

INSPECTION SERVICES UNIT – LOS ANGELES Pan, James (DSE) 213-393-8127

 INSPECTION SERVICES UNIT – SACRAMENTO

 Colosi, Monica
 (CO)
 916-599-0618

 Davis, Chris
 (DSE)
 809-4338

 Lachica, Michelle
 (AGPA)
 440-8484

 Ponce, Cesar
 (CO)
 440-8342

Who are todays presenters?

- Monica Colosi: Compliance Officer
- James Pan: District Structural Engineer
- Cesar Ponce: Compliance Officer
- Joe LaBrie: Regional Compliance Officer



Introduction to the TIO



What is the Testing, Inspection and Observation (TIO) Program?

What is the Testing, Inspection and Observation Program?

- Perhaps the most undervalued tool on any project.
- Much like a job card on a typical construction project
- Allows stakeholders to monitor all aspects of a projects quality assurance.



CAC vs CBC Chapter 1 "Scope and Administration Are they the same?

No, the CAC are <u>specific</u> administrative procedures necessary to comply with OSHPD projects.

CBSC "Scope and Administration" are **<u>general</u> construction regulations** for all construction in CA.

Is the TIO Required?

Yes, the Testing Inspection and Observation program is required by CAC Section 7-141(a) to assist the Design Professional of Record (DPOR) in the administration of work for projects under OSHPD's jurisdiction.

OSHPD Office of Statewide Health Planning and Development Facilities Development Division 2020 West El Camino Avenue, Suite 800 355 South Grand Avenue, 19th Floor www.oshpd.ca.gov/fdd Sacramento, CA 95833 355 South Grand Avenue, 19th Floor Los Angeles, California 90071 (213) 897-0166 Testing, Inspection and Observation Program 2019 California Building Standards Code – OSHPD 1



Do you have to use the TIO Form on OSHPD Website?

No, the TIO form was designed to assist design professionals working on projects under OSHPD's jurisdiction with the administration of those projects.

The DPOR may design and implement their own TIO form if they choose.



Who is Responsible for the TIO?



Who is Responsible for Maintaining the TIO?

The DPOR (architect and structural engineer) <u>shall</u> be responsible for the administration of the TIO. (CAC Section 7-141(a))...<mark>NOT THE IOR!</mark>

Note: when a structural engineer is not involved, the architect will be solely responsible for the TIO.

What if no Substantial Structural or Architectural Elements?

Where the project doesn't involve substantial structural or architectural elements, a registered mechanical or electrical engineer most applicable to the project <u>may</u> be responsible for the TIO program. (CAC Section 7-141(a))...NOT THE IOR!



Does the DPOR (Architects and Engineers) Need to Visit Job Site?

Yes, all architects and engineers to whom responsibility has been delegated for preparation of construction documents as listed on the application <u>shall</u> observe the work for their portion of the project. (CAC Section 7-141(b))



What is a DPOR, Delegate and an Alternate?

DPOR – Design Professional of Record In charge of the project

Delegate – Architect or engineer with authority **passed** <u>on</u> from the DPOR.

Alternate – Architect or engineer with <u>shared</u> authority from the Delegate

DPOR, Delegates and Alternates

7-113 and 7-115		Architect or Engineer in Responsible Charge (AOR/EOR) (DPOR) 7-115(a)		Alternate(s) 7-113(a)1	
	Delegates			Delegates	
GEOR	SEOR	MEOR	EEOR	CEOR	Other/Deferred Submittals (e.g. Elevator, Stairs, Curtain Wall,
7-115(a)3	7-115(a)3	7-115(a)3	7-115(a)3	7-115(a)3	Light Steel Framing, MEP Seismic Bracing, Fire Sprinkler/Alarm
Alternate(s)	Alternate(s)	Alternate(s)	Alternate(s)	Alternate(s)	Systems, etc.)
7-113(a)1	7-113(a)1	7-113(a)1	7-113(a)1	7-113(a)1	7-115(a)3
Alternat docume	tes may sig ents	gn & seal a	all constru	ction	Alternate(s)
** 11 40	logator and		uct bo idea	tified in aCD	7-113(a)1

** All delegates and alternates must be identified in eSP

How Does the DPOR Coordinate with Delegates?

All architects and engineers to whom responsibility has been delegated by the DPOR for preparation of construction documents as listed on the application shall:

- Observe the delegated portion of work
- Consult / Coordinate with the DPOR for approved construction documents, preparation of change orders, selection of QA personnel.



What is an "Approved Agency?"

CBC Part 1, Sec. 200 defines Approved Agency as,

"An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification where such agency has been approved by the building official."



Can the DPOR Have Alternates?

Can the architect or engineer in responsible charge have one or more persons to act as alternates to observe the work?

Yes, they may name one or more persons to act as alternates to observe the work provided they are architects or engineers qualified under the CAC to assume the responsibility. (CAC Section 7-141(c))



Can the IOR administer the TIO?

No, The architect and/or engineer in responsible charge of the work <u>shall</u> prepare and <u>administer</u> a testing, inspection and observation program.

The TIO shall be submitted to the Office for approval by OSHPD plan review staff and prior to the issuance of the building permit by OSHPD RCO. (CAC Section 7-141(d))



Does the TIO Need to Identify the Materials and Test to be performed?

Yes, the material tests, approved agencies and/or individual(s) to preform each test shall be identified. (CAC Section 7-141(e))



Does the TIO Program need to Identify the IOR(s)?

Yes, additionally if the project has more than one Inspector of recorded (IOR), the TIO program shall identify the distribution of responsibilities for each IOR. (CAC Section 7-141(f))

Who else needs to be identified on the TIO?

The TIO shall also identify each design professional that must, through personal knowledge as defined in CAC Section 7-151, verify that the work is in compliance with the approved construction documents. (CAC Section 7-141(h))

How does the TIO Program verify the the progress of the project QA?

The TIO program shall give specific <u>intervals or milestones</u> for which Verified Compliance Reports shall be completed and submitted by each participant or discipline . CAC Sec. 7-141(i)



Test and Inspections Beyond Code Minimum?

The designer may specify tests and special inspections beyond code minimum however, tests and inspections that are not applicable to the scope of the project shall not be specified.



Approved Agencies



Approved Agencies

Approved Agencies shall:

- Be selected by a health facility governing board or authority (Owner) per CAC 7-149(b) and CBC 1701A.3
- Approved by the <u>DPOR</u> per CAC 7-149(b)



Approved Agencies Cont.

- Be objective and "<u>Independent</u>" from the contractor responsible for the work per CBC 1703A.1.1 and PIN 58
- Have <u>adequate and calibrated equipment</u> to perform tests. CBC 1703A.1.2
- Employ experienced personnel <u>educated in</u> <u>conducting, supervising and evaluating</u> <u>tests and special inspections</u> CBC 1703A1.3

Special Inspectors



Employment of Special Inspectors

CBC Sec. 1701A.3. Special inspections and tests. [OSHPD 1 and 4] In addition to the inspector(s) of record required by the CAC, the owner shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Chapters 17A, 18A, 19A, 20, 21A, 22A, 23 and 25,...

IORs and Conflict of Interest

Can the IOR employ the "approved agency"?

- No this is considered a conflict of interest.
 Can the IOR employ individual special inspectors?
- No unless the IOR <u>is</u> the "approved agency".

Who does NOT employ the special inspector?

 The contractor shall <u>not</u> employ special inspectors (or approved agencies) per CBC 1703A1.1

Can the IOR perform Special Inspections?

Yes, In addition to the general duties of an IOR, the IOR may, when qualified, serve as a special inspector <u>when approved by the Office</u> <u>and listed in the Testing, Inspection and</u> <u>Observation Program.</u>"



What Does the IOR have to do if they want to be a Special Inspector on the Job?

- Be approved by the DPOR
- Have the appropriate knowledge and/or certification
- Have the time and desire (report meeting CBC 1704A.2.4
- Have the required tools
- OSHPD RCO must confirm IOR's workload


Can the DPOR serve as the Special Inspector?

Yes, the DPOR may <u>serve</u> as the special inspector if qualified and approved by OSHPD





Can the DPOR serve as the special inspector? Cont.

CBC 1704A.2.1 ... The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as the special inspectors for the work **designed by them**, provided they qualify as special inspectors.



Special Inspections



What is Special Inspection?

CBC Sec. 200 Special Inspection. Inspection of construction requiring the **expertise of an approved special inspector** in order to ensure compliance with this code and the approved construction documents.



What is Continuous Special Inspection?

CBC Sec. 200 Continuous Special Inspection. Special inspection by the special inspector who is **present continuously** when and where the work to inspected is being performed.



What is Periodic Special Inspection?

CBC Sec. 200 Periodic Special Inspection. Special inspection by the special inspector who is <u>intermit-tently present</u> where the work has been or is being performed and at the completion of the work.

What work requires special inspection? (Special Cases)

CBC 1705A.1.1 Special cases. Special inspections shall be required for proposed work that is, in the opinion of the building official, <u>unusual in its nature</u>, such as, but not limited to, the following examples:

 Construction materials and systems that are <u>alternatives to materials</u> and systems prescribed by this code.



What Work Requires Special Inspection? (Special Cases)

- Unusual design applications of materials described in this code.
- Materials and systems required to be installed in accordance with <u>additional manufacturer's</u> <u>instructions</u> that prescribe requirements not contained in this code or in standards referenced by this code.



What work requires <u>Off-site</u> Special Inspection?

Off-site fabrication of structural parts

CBC 1704A.2.5 "Where fabrication of structural, loadbearing or lateral load-resisting members or assemblies is being conducted on the premises of a fabricator's shop, <u>special inspections of the fabricated items shall</u> <u>be performed during fabrication."</u>



Who Determines The Test and Inspections To be Done on the Project?

The **DPOR shall define all code required tests and inspections** as a minimum by submitting a **"Statement of Special Inspections."** – not the OSHPD plan reviewer(s) or Field Staff.



What does the Statement of Special Inspections Contain?

CBC 1704A.3.1 Statement of special inspections (prepared by the DPOR) contains:

 The materials, systems, components and work required to have special inspections or tests by the building official or by the registered design professional responsible for each portion of the work.



What does the Statement of Special Inspections Contain? Cont.

- The type and extent of each special inspection.
- The type and extent of each test.
- Additional requirements for <u>special</u> <u>inspections or tests for seismic or wind</u> <u>resistance (CBC 1705A.11, 1705A.12 and</u> 1705A.13)



What does the Statement of Special Inspections Contain? Cont.

- For each type of special inspection, identification as to whether it will be:
 - <u>Continuous</u> special inspection
 - Periodic special inspection, or
 - Performed in accordance with the <u>referenced standard</u> where inspections are defined



Approval of Special Inspectors



What is the Definition of a Special Inspector?

CBC Sec 200. "A qualified person employed or retained by an approved agency and approved by the building official as having the competence necessary to inspect a particular type of construction requiring special inspection."

Who approves the special inspector?

The DPOR and OSHPD per CAC 7-141(d) & 7-144(a)

7-141(d) The architect or engineer in responsible charge of the work shall prepare a testing, inspection and observation program...

7-144(a) ... hospital governing board shall provide for competent, adequate and continuous inspection...
satisfactory to the architect or structural engineer or both, in responsible charge of the work, or the engineer in responsible charge of the work and the Office.

OSHPD Office of Statewide Health Planning and Development

How is the approval of special inspector(s) documented?

The DPOR identified the approved agency(ies) with the names of individual special inspectors are listed in the TIO program.

OSHPD reviews the building permit application or during construction (prior to start of the specific task).



Qualification of Special Inspectors



Special Inspectors - What qualifications are required?

CBC 1704A.2.1. ... The special inspector shall:

- provide <u>written documentation</u> to the building official demonstrating the <u>competence and</u> <u>relevant experience or training</u> ... relevant in complexity to the same type of special inspection activities for projects of <u>similar complexity and</u> <u>material qualities</u>.
- These qualifications are in addition to qualifications specified in other sections of this code. (see next slide)



Special Inspectors - What qualifications are required? Cont.

- Minimum qualification for many types of special inspection are implied by CAC 7-204(c)
- In general, industry standard qualifications are acceptable; e.g. ICC/ACI for concrete
- There are specific Code requirements for some; e.g. welding inspectors shall be CWI per AWS QC1

Note: Reference CBC 1705A for Required Special Inspections and Test



What experience is required?

- Certification alone is not adequate
- The special inspector shall have experience in work of similar complexity and materials per CBC 1704A.2.1 e.g:
 - Residential concrete foundation is not "similar" to concrete foundation for a hospital tower
 - Cast-in-place is not the same material as shotcrete or prestressed concrete

Note: It is the DPOR's responsibility to evaluate the Special Inspector and to provide suitable documentation to OSHPD for review/approval

> Office of Statewide Health Planning and Development

Qualification of IORS



What is Required for IOR Approval?

The Inspector of Record shall be approved prior to issuance of a building permit. Application for Inspector of Record (OSH-FD-124) shall be submitted.

An <u>individual</u> shall be approved – <u>not an agency, group</u> <u>or company.</u>

The individual shall (per CAC 7-212):

- Be appropriately certified
- Be qualified for the specific scope of the project
- Have adequate time available to perform the required duties.



IOR Application Form OSHPD-FD-124

Appropriately certified:

Application Specific Information – Inspector of Record				
OSHPD Certification Number				
Are you engaged in a business or other employment that requires a portion of your time?				
If yes, describe				

CERTIFICATION OF APPLICANT for INSPECTOR OF RECORD

I hereby certify that all answers to the questions on this form are true, and I agree and understand that any misstatement of material fact contained in this application will be sufficient cause for my dismissal on this project, and possible suspension or revocation of my Hospital Inspector Certification. If I undertake additional work other than stated herein, I will notify the owner, the Architect, and/or Engineer, and the Office of Statewide Health Planning and Development, without delay. If appointed, I will accept the responsibilities of Inspector of Record on the above mentioned project and will discharge the duties imposed upon me by all applicable sections of the Health and Safety Code.

Signatu	Data	
Signatu	Date	



IOR Application Form OSHPD-FD-124

Adequate time for the Project:

Application Specific Information – Inspector of Record			
OSHPD Certification Number			
Are you engaged in a business	or other employment that requires a portion of your time?		
If yes, describe			

CERTIFICATION OF APPLICANT for INSPECTOR OF RECORD

I hereby certify that all answers to the questions on this form are true, and I agree and understand that any misstatement of material fact contained in this application will be sufficient cause for my dismissal on this project, and possible suspension or revocation of my Hospital Inspector Certification. If I undertake additional work other than stated herein, I will notify the owner, the Architect, and/or Engineer, and the Office of Statewide Health Planning and Development, without delay. If appointed, I will accept the responsibilities of Inspector of Record on the above mentioned project and will discharge the duties imposed upon me by all applicable sections of the Health and Safety Code.

Signature

Date



IOR Application Form OSHPD-FD-124

And don't forget:

Application Specific Information – Inspector of Record			
OSHPD Certification Number			
Are you engaged in a business or other employment that requires a portion of your time?			
If yes, describe			

CERTIFICATION OF APPLICANT for INSPECTOR OF RECORD

I hereby certify that all answers to the questions on this form are true, and I agree and understand that any misstatement of material fact contained in this application will be sufficient cause for my dismissal on this project, and possible suspension or revocation of my Hospital Inspector Certification. If I undertake additional work other than stated herein, I will notify the owner, the Architect, and/or Engineer, and the Office of Statewide Health Planning and Development, without delay. If appointed, I will accept the responsibilities of Inspector of Record on the above mentioned project and will discharge the duties imposed upon me by all applicable sections of the Health and Safety Code.

Signature

Date



Questions





Summary of Changes from the 2016 TIO Form

(Cesar)



Summary of Changes to the TIO Form

- Headings revised for consistency with code Triennial change
- Changes to Tab B include:
 - initial/date for IOR and OSHPD Staff
 - removed "performed off-site" now Tab C
 - new elec. and mech. Test.
- Tab C "On-site Special Inspections" (new)
- Tab D "Off-site Special Inspections" (new)



Summary of Changes to the TIO Form Cont.

- Tab E "Required Compliance Forms"
- Tab F "Construction Verification"
- Tab G "Inspector of Record (IOR) Responsibility"
- Tab H "Plan Review Approval"
 - Formatting
- Tab I "Building Permit Approval"
 - Verbiage change related to "Samples and Test"
 - Formatting



Summary of Changes to the TIO Form Cont.

- Tab J "Summary of Changes"
 - "X" is no longer acceptable when identifying the DPOR have verified the acceptance statements. Signature is now required.
 - Formatting
 - Added initial/date to arch./eng. signature box
 - Added initial/date to struc. eng. signature box
 - Added initial/date to OSHPD concurrence box



Changes to the TIO Form Tab A <u>Project Info.</u>

Updated Header to reflect the new Los Angeles location:

OSHPD Office of Statewide Health Planning and Development

Facilities Development Division www.oshpd.ca.gov/fdd 2020 West El Camino Avenue, Suite 800 Sacramento, CA 95833 (916) 440-8300 355 South Grand Avenue, 19th FloorLos Angeles, California 90071(213) 897-0166

Testing, Inspection and Observation Program 2019 California Building Standards Code – OSHPD 1

This program is prepared and submitted for an OSHPD 1 project. OSHPD 1 projects include all construction and remodel projects for : general acute care hospitals, acute psychiatric hospitals, and general acute care hospitals providing only acute medical rehabilitation center services.

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Changes to the TIO Form Tab A <u>Project Info.</u>

Included commonly used abbreviations.

Abbreviations:		
CAC: California Administrative Code	AAMA: American Architectural Manufacturers Association	
CBC: California Building Code	NFPA: National Fire Protection Association	
CEC: California Electrical Code	FM: FM Approval Standards	
CMC: California Mechanical Code	DPOR: Design Professional of Record	Version: R3.3

OSHPD Office of Statewide Health Planning and Development

Changes to the TIO Form Tab B <u>Test.</u>

- Removed "Performed Off-Site" Column
- Included "initial/date" in Compliance Verification by IOR signature box
- Included "initial/date" in Compliance Verification by OSHPD/FDD signature box

SECT	ION B	NOTE: Approved agencies, individuals, and all changes to the TIO program shall be identified, evaluated by the DPOR and approved by OSHPD prior to proceeding with the related work.		
Facility #:	Facility Name:	Project #: Sub #:		
DUR				
Index # REQUIRED (Select)	TESTS	RESPONSIBLE APPROVED AGENCY BY IOR (Initial/Date) U SE U LIANCE U		



Changes to the TIO Form Tab B <u>Test – Electrical (new).</u>

<u>Name</u>	Code Reference
Isolate Power Systems – Impedance of Isolated Wiring Test	2018 NFPA 99 6.3.2.9.2.1
Emergency Stored Electrical Energy System Test	NFPA 110-2016 Section 7.6
Torque Electrical Connections	CEC 110.3(B) & 110.14(D)
Selective Coordination Study and Testing	CEC 240.12 & 700.27
Nurse call system	CEC 517.123
Arc Energy Reduction	CEC 240.67 & 240.87
Short-Circuit Current Calculations	CEC 110.24(A), 409.22, 430.99, 440.10(B)
Essential Electrical System Coordination Study	CEC 517.31(G) & 700.32
Elevator Selective Coordination Study	CEC 620.62



Changes to the TIO Form Tab B <u>Test – Mechanical (new).</u>

Precautionary testing and air balance is required prior to demolition work commencing and after the completion of demolition work to demonstrate that air flows to areas outside the scope of work are maintained.

<u>Name</u>	<u>Code Reference</u>
Pre-demolition Air Flow Test and Report	CMC 407.3
Post-demolition Air Flow Test and Report	CMC 407.3
On-site Special Inspections (new)

The DPOR consult with the contractor and shall identify all specific special inspections required to be performed for the project <u>on-site</u>.





On-site Special Inspections (new)

General areas of special inspection:

Foundation	Alternative Systems
Concrete	Nonstructural Components, Supports and Attachments
Masonry	Mechanical Special Inspections
Steel	Plumbing Special Inspections
Wood	Fire Protection Special Inspections
Other Structural Materials	Other Special Inspections

Note: the project may contain additional special inspections other than those listed above

OSHPD Office of Statewide Health Planning and Development

Off-site Special Inspections (new)

The DPOR consult with the contractor and prior to commencement of related fabrication/construction and, shall identify all special inspections to be performed <u>off-site</u>.

SEC	TION D	NOTE: Approved agencies, individuals, and all changes to the TIO prog be identified, evaluated by the DPOR and approved by OSHPD prior to proceeding with the related work.				
Facility #:	Facility Name:	Project #:		Sub #:		
	URING CONSTRUCTION DOCUMENT	DURING CONSTR				
Index # REQUIRED (Select)	OFF-SITE SPECIAL INSPECTIONS	RESPONSIBLE APPROVED AGENCY AND/OR INDIVIDUAL (IDENTIFY SPECIAL INSPECTOR)	COMPLIANCE VERIFICATION BY IOR (Initial/Date)	OSHPD/FDD USE (Initial/Date)		

OSHPD Office of Statewide Health Planning and Development

Off-site Special Inspections (new)

General areas of special inspection:

Concrete	Nonstructural Components, Supports and Attachments
Masonry	Mechanical Special Inspections
Steel	Plumbing Special Inspections
Wood	Fire Protection Special Inspections
Other Structural Materials	Other Special Inspections
Alternative Systems	

Note: the project may contain additional special inspections other than those listed above



Required Compliance Forms (new)

The <u>**DPOR shall identify**</u> the name of all the 2019 California Energy Code <u>Non-Residential forms</u> required for the project (see Title 24, Part 1 Section 7-118 and 7-141(d) & (g)).

Some documents may require testing not identified by the CBSC, these tests shall also be referenced and included.

Note: Instructions on which forms are required may be found on the "Instructions" tab on the Excel version of the TIO



Who fills out the California Energy Compliance Forms?

The forms identified on the TIO by the DPOR are required to be <u>completed under the</u> <u>purview of the installing contractor</u> to document what was installed to meet the requirements of the California Energy Code and outlined in the Non-residential Code Compliance forms.



Does the Field Technician Sign?

YES, the field technician signs and attest that the construction or installation identified on the "Certificate of Acceptance" complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency...



Who fills out the California Energy Compliance Forms? Cont.

FIELD TECHNICIAN'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- 1. The information provided on this Certificate of Acceptance is true and correct.
- 2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).
- 3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
- 4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.

Field Technician Signature:				
Position with Company (Title):				
CEA/HERS/ATT Certification Identification (If applicable):				
Phone:	Date Signed:			
	Position with Company (Title): CEA/HERS/ATT Certification Identification (I			



Who is the "Responsible Person" for the CEC forms?

Typically the **licensed "Installing Contractor"** responsible for the work. By signing they accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.



What is the "Responsible Person" for the CEC forms?

RES	RESPONSIBLE PERSON'S DECLARATION STATEMENT									
l ce	I certify the following under penalty of perjury, under the laws of the State of California:									
1.	1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information									
	provided on this Certificate of Acceptance.									
2.	I am eligible under Division 3 of the Business and Professions Code ir	n the applicable classification to acc	ept responsibility for the system							
	design, construction or installation of features, materials, componen	ts, or manufactured devices for the	scope of work identified on this							
	Certificate of Acceptance and attest to the declarations in this stater	nent (responsible acceptance perso	n).							
3.	The information provided on this Certificate of Acceptance substanti	iates that the construction or install	ation identified on this Certificate							
	of Acceptance complies with the acceptance requirements indicated	in the plans and specifications app	roved by the enforcement agency,							
	and conforms to the applicable acceptance requirements and procee	dures specified in Reference Nonres	idential Appendix NA7.							
4.	I have confirmed that the Certificate(s) of Installation for the constru	iction or installation identified on th	is Certificate of Acceptance has							
	been completed and is posted or made available with the building pe	ermit(s) issued for the building.								
5.	I will ensure that a completed, signed copy of this Certificate of Acce	ptance shall be posted, or made av	ailable with the building permit(s)							
	issued for the building, and made available to the enforcement agen	cy for all applicable inspections. I ui	nderstand that a signed copy of							
	this Certificate of Acceptance is required to be included with the doc	cumentation the builder provides to	the building owner at occupancy.							
Resp	oonsible Acceptance Person Name:	Responsible Acceptance Person Signature:								
Rest	oonsible Acceptance Person Company Name:	Position with Company (Title):								
neor										
Addı	ress:	CSLB License:								
City/	Date Signed:									

What is OSHPD Field Staffs Responsibility?

Upon completion of all required forms, at least one OSHPD Field staff: Compliance Officer (CO), Fire & Life Safety Officer (FLSO), or District Structural Engineer (DSE) <u>will review</u> <u>for compliance with the approved</u> <u>construction documents and the TIO program</u> and indicate their concurrence with an initial and date.



Required Compliance Forms (new)

Non-residential compliance forms link:

2019 Testing, Inspection, and Observation Form

To be used on projects submitted on or after January 1, 2020

- 2019 TIO Form OSHPD 1 PDF Format
- Electronic Test, Inspection, Observation (eTIO) form for OSHPD 1 Buildings MS Excel Format
- 2019 TIO Form OSHPD 2 PDF Format
- Electronic Test, Inspection, Observation (eTIO) form for OSHPD 2 Buildings MS Excel Format

California Energy Code Forms

2019 Nonresidential Compliance Forms



Required Compliance Forms (continued)

- IOR will not be required to complete these forms
- IOR will be required to collect forms
- For detailed instructions on the CEC forms visit www.oshpd.ca.gov

Testing, Inspection, and Observation (TIO) Program

Section 7-141, 2016 California Building Standards Code, requires the architect or engineer in responsible charge of a project to submit a Testing, Inspection and Observation (TIO) program to the Office of Statewide Health Planning and Development (Office) for approval prior to issuance of a building permit. To assist the industry with preparation and implementation of the TIO program, the Office has developed the following resources:

OSHPD 1 Buildings

Testing, Inspection and Observation Program for OSHPD 1 projects (OSH-FD-303A) (OSHPD 1 projects include all construction and remodel projects for general acute-care hospitals and acute psychiatric hospitals. OSHPD 1 projects also include construction and remodel of skilled nursing facilities and/or intermediate care facilities except those of single-story, Type V, wood or light steel-frame construction.)

OSHPD 2 Buildings

Testing, Inspection and Observation Program for OSHPD 2 projects (OSH-FD-303B) (OSHPD 2 projects are limited to construction and remodel projects for skilled nursing facilities and/or intermediate care facilities of single-story, Type V, wood or light steel-frame



Instructions for preparing the TIO Form



Required Compliance Forms (continued)

FOR MORE INFORMATION ON THE 2019 CALIFORNIA ENERGY CODE FORMS CONTACT THE ENERGY COMMISION BUILDING ENERGY EFFICIENCY STANDARDS AT:

TOLL-FREE HOT LINE AT 800-772-3300 OUTSIDE OF CALIFORNIA 916-654-5106 EMAIL AT <u>title24@energy.ca.gov</u>



Changes to the TIO Form Tab F Construction Verification

- Added "Substantial Compliance" (Remodel, Renovations, Maintenance projects, Equipment Replacement)
- Added "Certificate of Occupancy" (New Buildings, Additions, Changes in Occupancy)
- Renamed "Project Completion" to "Construction Final"

Note: Verbiage changed to align with AB 2798



Changes to the TIO Form Tab G Inspector of Record

Added "to make sure responsibility for the inspection of every part of the work is assigned.

SECTION G	Inspector of Record (IC	OR) Responsibilit	y
Facility #:	Facility Name:	Project #:	Sub #:
INSPECTOR OF RECORD RESPONSIBILITIES. P of construction in all stages of its progress to er Codes, Referenced Standards, Listings and Manu a project has more than one inspector of record, t	when more than one IOR will share re- er CAC 7-145: "The Inspector shall have personal knowled isure that the work is in accordance with the approved cor facturer's Installation Instructions applicable to the work s he distribution of responsibilities for the work shall be cle C 7-144(b). One IOR shall be assigned responsibility for "a inspection of every part of the work is assigned.	lge, obtained by continuous insp nstruction documents." This incl shown in the approved construct arly identified for each IOR per (ection of all we udes applicabl ion documents CAC 7-141(f).



Changes to the TIO Form Tab H <u>Plan Review Approval</u>

- Reworded note at the top to say "NOTE: When a structural engineer has been delegated responsibility for a portion of this project his or her signature is also required. For testing, Inspection and Observation Program Instructions visit:..."
- Reworded note from "For OSHPD Use Only" to "For OSHPD Use"
- Enlarged the Signature and Date box to allow for reviewer stamp of approval
- Renamed "A", "AC" and "D" to "Approved", "Approved with Comments" and Denied"

OSHPD Office of Statewide Health Planning and Development

Changes to the TIO Form Tab I Building Permit Approval

	From	1	То				
SECTION G	BUILDING F	PERMIT APPROVAL	SECTION I	BUILDING F	PERMIT APPROVAL		
Facility #:	Facility Name:	Project #:	Sub #:	Facility #:	Facility Name:	Project #: Sub #:	
NOTE: For testing, Inspection and C	Observation Program Instructions, visit our	website: http://oshpd.ca.gov/FDD/Plan_Revie	TIO.html#TIO	NOTE: For te	eting Inspection and Observation Progra	Instructions visit: www.ochnd.cz.gov	
Attached To be provided following deten prior to proceeding with the wor Not applicable. Project has no Required test and inspection rep and inspections. If not designat In addition to the preprinted tests an indicated: Other Special Inspections See Attachment Verification that approved test an 1703A.1.1 Verification of independence a In accordance with the CAC S Testing agency qualification This program has been prepared projects for general abute care has the prepared projects for general abute care has the prepared projects of general abute care has the prepared projects of general abute care has the prepared	mination of the responsible firm(s) or individu. that requires tests or special inspections. required tests or special inspections. orts shall be prepared and submitted to O d, all reports shall be submitted to the Off nd special inspections identified on this form, d inspection agencies are objective, comp nd acceptance of test and inspection agencie ection 7-141. rapproval or approval of testing agencies thre for approval. and submitted for an OSHPD 1 project. Cospitals and acue psychiatric hospitals.	this program includes additional tests and special betent and independent as required by the CI s by Registered Design Professional (RDP) in re	eed by the Office. on of all tests al inspections as BC 2016 Section assponsible charge and remodel and remodel of	Samples of Test and Inspect Testing agency qualification for Attached To be provided following d Office prior to proceeding Not applicable. Project he This program has been prepu- revaluated and accepted by the 17025 Section centrifications, certifications evaluated and accepted by the aspects (when such delegation At test and special inspection r engineer by the testing agency Special inspection reports shall All reports chall clearly state wh documents and whether the res	or approval or approval of testing agencies through letermination of the responsible firm(s) or indivi- with the work that requires test or special inspe- sion required test or special inspections ared and aubmitted for an OSHPD 1 project projects for general acute care hospitals an s, experience and independence of the approve undersigned in accordance with CAC Section able. Approved agencies and individuals named structural engineer delegated responsibility for has been made). Peports shall be submitted to the IOR, hospital or per CAC 7-149(a) within seven (7) calendar da I be signed by the individual who performed the either the tests or special inspections were perfults indicate compliance with those documents. spection reports are either attached, or shall be	Tormed by laboratories approved through OPAA Program ough OPAA program. duals. Samples shall be submitted to and approved by the ections. I. SSHPD 1 projects include all construction and remodel d acute pychiatric hospitals. d agencies and individuals named on this form have been 7:141, 7:144 & 7:149, CBC 1703A.1.1 & 1704A.2.1, and ISO 1 for structural tests and special inspections have been the design and administration of construction of the structural wher, architect in responsible charge, and the structural wret, architect in responsible charge, and the structural sy of the test or special inspection.	



Building Permit Approval (continued)



NOTE: no work shall start until this part of the TIO is approved



Changes to the TIO Form Tab J <u>Summary of Changes</u>

"X" is no longer acceptable when identifying the DPOR has verified the acceptance statements and now requires "A signature in column F and/or G" this Form are applicable to any approved agencies/testing laboratories and special inspectors added."





Changes to the TIO Form Tab J <u>Summary of Changes</u>

- Reworded "Revision #" to "Revision Number"
- Added "Initial/date" to the architect/engineer of record signature box
- Added "Initial/date" to the Structural Engineer of record signature box
- Reworded "DATE" to "DATE of Effective Change"
- Added "Initial/date" to the OSHPD FDD Concurrence signature box

Test and Special Inspection Reports



Test & Special Inspection Reports

What kinds of reports are required from special inspectors and the approved agencies?

- Report requirements (7-149 & 1704A.2.4)
- Deviation reports (7-145(b) & 1704A.2.4)
- Verified compliance reports (7-151 & 1704A.2.4)



Who Gets the Special Inspection Reports?

The approved agency shall submit reports and test to:

- DPOR, and
- IOR



What's Required in the Special Inspection Test and Reports?

CBC Sec. 1704A.2.4. The report shall:

- indicate that work inspected or tested <u>was or</u> <u>was not completed</u> in conformance approved construction documents
- **Discrepancies** (if they were not corrected)
- A <u>final report</u> documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests...



What Kind of Reports are Required?

- At least daily IOR reports per CAC Sec. 7-145
- A separate report is <u>recommended for each</u> <u>type of test and special inspection</u> listed on the TIO program to facilitate recordkeeping and compliance review (e.g. do not combine welding with fireproofing)
- A separate report is required for each project
- As indicated on the TIO program



Test & Special Inspection Reports

What should reports say?

- Shall state that work was <u>"tested" or "inspected"</u> (not "observed")
- Shall indicate whether work conforms to approved construction documents
- Shall identify <u>specifically</u> what was tested or inspected and what was accepted and not accepted
- Shall describe all <u>discrepancies</u>
- Special inspection reports shall <u>be signed</u> by the special inspector



Test Reports

CAC Sec. 7-149(a) ...Where job conditions warrant, the architect or engineer may waive certain specified tests contingent upon the approval of the Office. The Office shall be notified as to the disposition of materials noted on laboratory reports. ... The reports shall state definitely whether the material tested complies with the approved contract documents.



Test & Special Inspection Reports

Report "disclaimers" shall not be allowed:

"Unless otherwise noted ... "

All inspectors are required to <u>state</u> whether work complies or not. This disclaimer forces the <u>reader</u> of the report to <u>interpret</u> the entire report instead of the inspector.

Reports should refer to "<u>OSHPD</u> approved documents;" reference to "approved documents" only may be misunderstood/misinterpreted.



Unacceptable Disclaimers

	1		
		ATTOTACTORY NO LINGAT	
FILLER MATERIAL STORAGE/C	ONTROL PER AWS D1.1:	the second	
HIGH STRENGTH BOLTS:		TYPE:	
TOROUE/TENSION VALUE APP	LIED? NA		
REPORT: (INCLUDE LOCATION O	F WORK INSPECTED, JOB PROG TS AND SKETCHES IF NEEDED.)	RESS AND NOTE ANY WORK REJEC	TED OR JOB PROBLEMS. ATTACH
*Received material certs for ID'ing.			• • • • • • • • • • • • • • • • • • •
4x3x3/8 - ht # 55311 angle			
5/16 plate - ht # PL08106731		······································	
1/2 plate – ht # PL08206976			
8x8x1/2 - ht # Y099948 angle			
*Crew has cut material and pieces n	ik'd:C3, C1& P36 have been w	elded complete. Observed the wel	ding and inspected the welds.
GOOD TO GO.			
To the best of my knowledge as wor	k performed/completed today	was in compliance with approved	RFI's, grawings, procedures,
specifications and plans. Unless othe			
INCORCTOR: (DDINIT NAME)	<u> </u>	LICENSE:	
			OSHPD
			Office of Statewide Health

Planning and Development

Acceptable Compliance Statement

oor/Level	Weld/ Connection Type	Member/ Joint Type	Locations	Visual	NDE Type	Acc/Rej	Repaired/ Reinspected	Status	Remarks
6	FW	PPPEM	L/B15, L.2/B15	Ves		ACC	-	Comp	
			L.5/BIS, L.7/BIS	Yes		ACC		COMP	
V	V	V	M/B15, M.3/BIS	YES		ACC		Comp	
			10.01 .010.0	1.02				1	
tes/Commer	ts DOLL	^							
(es) continer	15 IR96	\$							

OSHPD Office of Statewide Health Planning and Development

Sample Test Reports

CAC Sec. 7-141(k). The tests, inspection and observation program shall include samples of test and inspection reports and provide time limits for the submission of reports.

Production reports shall follow the approved submitted format.

104



CONCRETE SAMPLING REPORT

INSPECTOR	NAME			JOB NUMBER			[IATE			MTT	WT	FSS
JOB NAME	Sample Inspector Pending				2019-01-25 UUBISDICTION INSPECTION REQUEST #								
ADDRESS	City of Hope - Helford Hospital IR Ste Renovation					S171112-19-00 OSHPD 872							
ADDRESS		1500	E. Duarte	e Rd., Duarte, C/	A			ENERAL CON				REPORT	345
ARCHITECT]			ENGINEER			2	UBCONTRACT	OR (if any)			ONGOIN	G OR FINAL Ongoing
			REQUIR	EMENTS: Limit of one	e job num	iber, on	e permit numb	er per sheet.	Identify all work	by type and SP	ECIFIC Location.		Ongoing
	YOU M			vork must be specifical DJECT PLANS AND S									EPOUR
				D	ESCI	ript	ION OF	WORK	INSPECT	ED			
1. Arrive	d onsite a	as reques	ted. Che	ecked in with: IO	R and	Site C	ontact upo	n arrival					
Perform	ed ACI qu	uality con	trol for 40	00 cubic yards of	concre	ete foi	r footing po	ur. The c	oncrete supp	olier was Ba	tchit, Inc. and t	he approv	ed mix design
was M12	2345 - 40	00 psi. 1	obtained	1 slump which p	assed	the m	iinimum sp	ecification	s per 3.13.5	C and ASTN	A Standard C1	43. Lobta	ined 1 set of 5
cylinders	s for testir	ng. See l	nspector	report for addition	onal pla	aceme	ent informa	tion.					
SET # OF #	(TRUE VIE	TICKET #	-			SLUMP	AIR TEMP	CONC TEMP		THE	MIXING TIME	[107.12]	REMARKS
1 of 1	TRUCK#		G/4	AMPLE LOCATION	4			5	WATER ADDED 5 gallons	TIME CAST	45 min	AIR %	M12345
	1010	0110	014			I			·	2.401 1	40 11111	1.2.70	1112040
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						I	•	[•				
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					_			-					
					-								
									THIS	C	ONTAINS No	n-Complian	it Items
	Add	itional Pag	e (Page #)				ĸ	EPORT	Does No	t Contain No	n-Complian	t Items
Pla	ns Review	ed?	7	Specs Rev	iewed?	∇	IN	* * #	any item is mark				please clearly indicate
			X U	·						why in the bo	idy of this Field Insp	ection Repor	t
		Certi	ficatior	n of Complia	nce			TIME IN	TIME OUT	REG HRS	OT HRS	DT HRS	TOTAL
	pen	sonal knowledge th	e work during the h all approved pla	al the above statements are true, a period covered by this report has b ns, specifications, and applicable o plowing approving authority:	een performe	dand							
		Authority:		2 3 weren).					1	ACH	NOWLEDGED BY:	I	
		tor Name:		Sample Ins	pector]				Σ	inple		
[Inspector			Supe				-		5	Gignature		
	Ins	pector ID:		- 1									
								-		Pri	nted Name		
								1					

			DA'	• ASTM C31, C					cimer	IS	Internal Lab	Number
CONCR	ETE	GROUT					CO	RES	SH	OTCRETE	PRIS	M
X												
Address //									Job Numb	er		
Job Name		1	500 E. Duar	te Rd., Duarte, CA	Dami		OSHDD	DOA	CITY		nding Jurisdiction	
	of Hone -	Helford Hos	pital IR Ste I	Renovation	Permit	<u>רי</u>	OSHPD S17124		UIT	Increment		SHPD
Architect		Engine		tonortation	Gener	ral Co	ntractor			Subcontractor (if a		
										Discount		
Location of Placer East Wall foot	_									Placement Inspect	ed by	
ocation of Placer		of Testing		Samp	oled at:		Truck	Point	of Discharge	Batch Plant Inspec	tor	
G/4	-											
Concrete Supplier			Plant Name				Number 2345			Truck Number 1313		
Type of Cement			Admixture			-	Ticket Number]		Other		
						877						
Slump 1	ſ	Water Added		Air Temp 60		- 1	Concrete Temp 75	I	Mixing Tin 45 min		Air Content 1.2%	
+ Jnit Weight		5 gallons	Number of Sam			- 1	rio cified PSI @ 28	3 Days	43 11111	Set Number (X of)		
						400					1 of 1	
Time Cast		Cast By	(Correct)				Date Cast	01-25	Date Rece	ived at Laboratory		
2:48 PM			Sampi	e Inspector ASTM C31,	0420 (0142						
Time Tested	Sample I Number		Test Date	Dimensions	6130,0		vrea	1064 U	ad	PSI	Type of Break	Tech
	1	7										millidis
	E											
	2	28										
	3	28										
	4	56										
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	5	Hold										
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		-			-							
					-							
	-	_									_	
	REPORT	SHALL NO		ODUCED, EXCEP	T IN F	ULL					ENT SOLUTIO	NS
COMPLIES:			DOE	S NOT COMPLY:				FC	R INFO OI	NLY:		

Sample of On Going Report

OSHPD
Office of Statewide Health Planning and Development

An IndpSolutions, Inc. Company

CONCRETE SAMPLING REPORT

INSPECTOR	NAME	JOB NUMBER	DATE	M	T F S S					
	Sample Inspector	Pending	2019-01-25							
JOB NAME			BUILDING / OSHPO PERMIT #	JURISDICTION	INSPECTION REQUEST #					
	City of Hope - Helford I	Hospital IR Ste Renovation	S171112-19-00	OSHPD	872					
ADDRESS			GENERAL CONTRACTOR	\sim	REPORT NUMBER					
	1500 E. Duart	e Rd., Duarte, CA								
ARCHITECT		ENGINEER	SUBCONTRACTOR (# any)		ONGOING OR FINAL					
					Ongoing					
REQUIREMENTS: Limit of one job number, one permit number per sheet. Identify all work by type and SPECIFIC Location.										
Non-Compliant work must be specifically identified. Communication (RFI, Sketch, etc.) voiding previous non-compliant items must be listed.										
YOU MUST REVIEW THE PROJECT PLANS AND SPECIFICATIONS TO VERIFY THE SAMPLING REQUIREMENTS PRIOR TO STARTING THE CONCRETE POUR										
DESCRIPTION OF WORK INSPECTED										

1. Arrived onsite as requested. Checked in with: IOR and Site Contact upon arrival

Sample of <u>On-Going</u> Report



CAC Sec. 7-141 (I). All completed test and inspection reports shall be submitted to the inspector of record, the owner and the architect or engineer in responsible charge by the author of the report.

INSPECTOR NAME	JOB NUMBER	DATE		M T W	TFSSS	Sample Ins		2018-05-17	X				
Sample Inspector	Pen	BUIL	2018-05-17 XING / OSHPD PERMIT#	JURISDICTION	INSPECTION REQUEST #	JOB NAME	pe - Helford Hospital IR Ste Renovation	BUILDING PERMIT # \$171112-19-00	JURISDICTION INSPECTION REQUEST #				
City of Hope - Helford PROJECT ADDRESS	I Hospital IR Ste Renov		S171112-19-00	OSHPD	1234 REPORT NUMBER	ADDRESS		GENERAL CONTRACTOR	REPORT NUMBER				
1500 E. Dua	Inte Rd., Duarte, CA	SUR/	LAH Build	ers	1	ARCHITECT	500 E. Duarte Rd., Duarte, CA	LAH Builders	ONGOING OR FINAL				
				$\boldsymbol{\zeta}$	Fina				Final				
			er sheet. Identify all work by typ Sketch, etc.) voiding previous n		e listed		REQUIREMENTS: Take photo of ongoing work and outs		to below each photo.				
		chitect, structural enginee	r, building official and/or permit				PHOTOS OF ONGOI	NG WORK AND ISSUES					
		INSPECTIO	N TYPE										
Concrete Sampling & Inspect	tion	ncrete Inspection Only	y Technician onsit	te for sampling									
	DES	CRIPTION OF WO	ORK INSPECTED										
ITEM COMPLIES (P		S NO N/A	ITEM COMPLIE	s (During)	YES NO N/A								
Placement location cleaned and fre Required formwork In place.	e of debris.		t Mix Design was used. t time of concrete less than	00 minutos	X								
Joint preparation is as specified in o	/		nical vibrators used met pro		X								
The equipment to deliver concrete	/		nical vibration was performe										
placement location is suitable and i	in an acceptable		Attention was made to hig										
condition - conveyors, lines, pumps			to preclude voids and honey	/combing.						Sample of			
1. Arrived onsite as requested. C													
Placelt, Inc. received two shipmer rebar in Grade Beam GB-B1 on B				to Buildit, Inc Placelf	, Inc is placing					<u>Final</u> Report			
One set of (4) 6"x12"Cylinders we				ASTM Standards So	o Data Shoot for dotails					Report			
M line between 5-9 lines. Concret	e mix design RS300P4	4 was delivered by Ba	atchlt Ready Mix San Clen	nente Plant. Concrete	was properly								
consolidated by means of mechar Time 10:20am - Cylinders placed	nical vibrator and manta in Cure Box	iined within acceptab	le slump tolerances though	nout time of placemer	nt								
Observed placement of approxima		3000 PSI concroto fo	r conduit oncesomont by E	Pourt Inc. Concrete	was place along								
Observed placement of approxime	atery to cubic yards or a	5000 FSI COnciete Io	Conduit encasement by P	ount, me concrete	was place along								
MIX USED	DESIGN SLUMP	# OF SPECIMENS	DESIGN PSI	CUBIC YARDS PLACE	D REMARKS								
Master Flow 928		3											
Note: Please see spe			ETE ONE DATA SHEET FOR I	EACH SET OF TEST SPE	CIMENS								
	DESCR		COMPLIANT ITEMS										
			THIS	ONTAINS Non-Compl	iant Itoms								
Additional Page (Page	#)	ſ	•	ot Contain Non-Compl	iant nems								
Plans Reviewed?	Specs Reviewed?	XNN	OTICE: Start and end times										
Certification	n of Compliance		minimums. Signature				ertification of Compliance	TIME IN TIME OUT REG HRS	OT HRS DT HRS TOTAL				
I declare under penalty of perjury that all of		and that of my own	IME IN TIME OUT REG F	IRS OT HRS D	THRS	personal knowledge the wo	berjury that all of the above statements are true, and that of my own rk during the period covered by this report has been performed and						
personal knowledge the work during the pe installed in compliance with all approved plans							approved plans, specifications, and applicable codes, except as note we, by the the following approving authority:	ed					
	above.					Authority:]	ACK	NOWLEDGED BY:				
Inspector Name: Sample Inspector ACKNOWLEDGED BY (Verification of Time Only)					Completing		spe						
Inspector Signature:	Ser.			SH-		Inspector Name:	Sample Inspector						
Inspector ID:		-		Signature		Inspector Signature:	St.		Signature	OSH			
Inspector ID:						Inenest ID:							
Issued by:		_				Inspector ID:			Printed Name	Office of Statewide			
				Printed Name			An IndrSolutio	ms; Inc: Company	Rev. 5.0	Planning and Devel			
	4	An IndpSolutions; Ir	re: Company				111 21 4400000000		1004. 2.0				

Statewide Health and Development **CAC Sec. 7-141**. (I) All completed test and inspection reports shall be submitted to the inspector of record, the owner and the architect or engineer in responsible charge by the author of the report.

CONCRETE PLACEMENT REPORT

INSPECTOR NAME		JCB NUMBER	DATE			. M.	TW		F	8	8	
	ple Inspector	Pe	ending	2	018-0	5-17	Х					
PROJECT NAME					BUILDING / OSHPO PERMIT #			JURISDICTION		INSPECTION REQUEST #		
City	of Hope - Helford Hosp	S171112-19-00			OSHPD		1234					
PROJECT ADDRESS		GENERAL CONTRACTOR					REPORT NUMBER					
	1500 E. Duarte Ro	LAH Builders					1					
ARCHITECT		SUBCONTRACTOR (if any)						ONGONO OR ENVI				
										Fin	al	$\mathbf{>}$
	REQUIREMENTS: Limit of one job number, one permit number per sheet. Identify all work by type and SPECIFIC Location.											
	Non-Compliant work must be specifically identified. Communication (RFI, Sketch, etc.) voiding previous non-compliant items must be listed											
Note all communications with project architect, structural engineer, building official and/or permit granting authority officials.												

Sample of <u>Final</u> Report


March 15, 2017				ST	K1732	809:1 Co	oliform	Bacteria	Analysis		
Doctors Medical Cente	Cu	stomer	ID :	301794	43						
Attn:				Sys							
				Pro	ject N	ame :	Doctor	s Medica	l Cntr		
Analytical Results ID Sample Description Total Fecal E. Coli Units Method Prep Footnote											
ID Sample Descripti				E. Coli					Colilert-H		Footnote
Image: NR Not Required Absent Image: Absent A/P/100ml SM 9223B Collect N/R Not Required MPN Most Probable Number A/P Absence/Presence The samples listed above were Acceptable for both Total and Fecal Coliform A/P Absence/Presence											
Sample Handling Information											
ID Sample Number System Number Sample Type/Reason Sampler Employed By									oloyed By	Sampled	
1 STK1732809-001	N/A		System-Other							2017-	03-09 12:50
		[Field	l Analysi		Informa	tion				

Field Analysis/QA Information

ID	Sample Description	Cl Total/Free mg/l	Temp	Analysis Started	Analysis Completed	Contact	Contacted
1	Room 1732	/		2017-03-09 14:37 KJB	2017-03-10 10:03 JK	N/R	

Analyses were performed at the FGL Stockton Laboratory using Standard Methods 20th edition. If you have any questions regarding your results, please call. The FGL Stockton Laboratory is certified by California ELAP #1563 and ISO/IEC 17025:2005 PJLA, #75605,Testing.

Prepared By: SMH

American Dru

WHAT IS INCOMPLETE HERE?

- Jurisdiction indicated?
- OSHPD reference number?

Sample of <u>NOT CORRECT</u> Report

Approved By				
	Page	1 of 1		
Corporate Offices & Laboratory	Office & Laboratory	Office & Laboratory	Office & Laboratory TEL:	Office & Laboratory
TEL:	TEL:	TEL:	FAX:	TEL:
Env FAX: CA ELAP Certification No.	FAX: CA ELAP Certification No.	FAX:	CA ELAP Certification No.	FAX: CA ELAP Certification No.
	CA ELAP Certification No.	CA ELAP Certification No.		CA ELAP Certification No.



Analytical Results

ID	Sample Description	Total	Fecal	E. Coli	Units	M	ethod	Prep	Footnote
1	Room 1732	Absent		Absent	A/P/100m	I SM	9223B	Colilert-P/A 1	8
	Not Required samples listed above were Acc	MPN Most eptable for b			oliform		A/P Abs	ence/Presence	
			San	nple Handl	ing Inform	ation			
ID	Sample Number Syste	em Number	Samp	le Type/Rea	son Sa	mpler	Emp	loyed By	Sampled

Field Analysis/QA Information

System-Other

ID	Sample Description	Cl Total/Free mg/l	Temp	Analysis Started	Analysis Completed	Contact	Contacted
1	Room 1732	/		2017-03-09 14:37 KJB	2017-03-10 10:03 JK	N/R	

Analyses were performed at the FGL Stockton Laboratory using Standard Methods 20th edition. If you have any questions regarding your results, please call. The FGL Stockton Laboratory is certified by California ELAP #1563 and ISO/IEC 17025:2005 PJLA, #75605,Testing.

Prepared By: SMH

1 STK1732809-001

N/A

Sample of **Not Correct** Report



2017-03-09 12:50

Best Practices

- DPOR shall update the TIO prior to submitting for permit approval
- Design team to provide Construction Document Plans and Specs, and OSHPD paperwork including TIO
- Once Building Permit is obtained, Kickoff meeting should be scheduled. At the Kickoff meeting, design team, including OSHPD, IOR, Owner, CM (if it is part of the project) should attend the meeting
- TIO process should be included in the kickoff agenda meeting
- GC to provide construction schedule
- Once construction begins, GC schedules normal inspection by submitting an inspection request two or more days in advance to the IOR
- Same criteria should be followed for special inspections



Verified Compliance Reports



Who Needs to Submit VCRs to the OSHPD?

<u>CAC Sec. 7-151(a).</u> The following shall submit to OSHPD Verified Compliance Reports:

- Architect(s),
- Engineer(s)
- IOR(s)
- Approved Agencies
- Special Inspector(s) (in certain cases)
- Contractor or owner / builder



When are VCRs submitted?

CAC Sec. 7-151(f). Verified compliance reports shall be submitted to the Office at the *intervals or stages of the work as stated in the approved testing, inspection and observation program*...

- One copy prepared and signed by each required participant or discipline at the completion of the work.
- One copy prepared and signed by any participant or discipline at any time a special verified compliance report is required by the Office.
- When OSHPD requires a specific VCR for a portion of the project.

What do VCRs say?

The report shall:

- verify that the work ... has been performed and materials used and installed are in accordance with the approved construction documents.
- "Detailed statements of fact" as required by OSHPD
- "Work covered" shall be <u>clearly</u> described.
- If more than one individual ... describe the "work covered" by each individual on an attachment (list piece numbers?)

OSHPD Office of Statewide Health Planning and Development

Personal Knowledge Architect or Registered Engineer

H&SC Sec. 129830. Personal knowledge that is obtained by:

- <u>Periodic visits</u> to the project site of reasonable frequency, for the purpose of general observation of the work,
- From the <u>reporting of others</u> as to the progress of the work, testing of materials, and inspection and superintendence of the work that is performed between the periodic visits of the architect or the registered engineer.



Personal Knowledge Inspector

H&SC Sec. 129830. Personal knowledge that is obtained from:

- The inspector's personal <u>continuous inspection</u> of the work of construction in <u>all stages</u> of its progress at the site where the inspector is responsible for inspection,
- When work is <u>carried out away from the site</u>, that personal knowledge that is obtained from the <u>reporting of others</u> on the testing or inspection of materials and workmanship, for compliance with plans, specifications, or applicable standards.



Personal Knowledge Contractor

H&SC Sec. 129830. Means the personal knowledge that is obtained from the <u>construction of the building</u>. The exercise of reasonable diligence to obtain the facts is required.



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Α	Facility Information										
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в	Interval/Milestone*:	Sample C	oncrete Sampling		Ref. No.*:						
	This report includes cons	truction work to the	14th day of		, 20 18						
	* As identified on the approv	ved Testing, Inspection and (Observation Program	n							
D	The work inspected was done so in accordance with the OSHPD approved plans, specifications and post approved documents. Area Under Observation Compliance Statement: I hereby declare that, to the best of my personal knowledge*, the work performed and the materials used and installed covered by this report, are in compliance with the approved dorawings and specifications and any approved Post Approval Documents/Amended Construction Documents. If applicable, a tentative list of items to be completed or corrected is given herein below or attached hereto. This list may not be all-inclusive. Failure to include an item in it does not alter the responsibility of the Contractor/Builder to complete all of the work in accordance with the approved drawings and specifications and all applicable building codes. (*As defined in CCR, Title 24, Part 1, Section 7-151) Comments and/or Exception List: (attach additional sheets if necessary)										
F	Print Name:	Sam	le Inspector		Registration	n #.					
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OSH	-FD-123 (Rev 08/14)	STATE OF 0	CALIFORNIA - HEAI	TH AND HUMAN S	ERVICES AGENCY		Page 1 of 1				

CAC Sec. 7-151.

(a) In accordance with Section 7-15 1 (I), or when required by the Office, the architect(s), engineers(s), inspector(s) of record (IORs), approved agency, special inspector(s) and contractor or owner/builder shall each submit to the Office a verified compliance report, with their signature and based on their own personal knowledge, as defined by this section.

> Samples of Verified Compliance Report VCR

> > OSHPD Office of Statewide Health Planning and Development

CAC Sec. 7-151(a)

In accordance with Section 7-151(I), or when required by the Office, the architect(s), engineers(s), inspector(s) of record (IORs), approved agency, special inspector(s) and contractor or owner/builder shall each submit to the Office a verified compliance report, with their signature and based on their own personal knowledge, as defined by this section.

C Observed Elements of Construction and acceptance of tests/inspections for this reporting interval or project milestone: 1. Arrived onsite as requested. Checked in with: IOR and Site Contact upon arrival Performed ACI quality control for 400 cubic yards of concrete for footing pour. The concrete supplier was Batchit, Inc. and the approved mix design was M12345 - 4000 psi. I obtained 1 slump which passed the minimum specifications per 3.13.5C and ASTM Standard C143. I obtained 1 set of 5 cylinders for testing. See Inspector report for additional placement information.

The work inspected was done so in accordance with the OSHPD approved plans, specifications and post approved documents.

Samples of <u>Verified Compliance Report</u> VCR



Verified Compliance Report (VCRs)

Excerpt from Verified Compliance Report Form OSH-FD-123:

D

Area Under Observation Compliance Statement:

I hereby declare that, to the best of my personal knowledge*, the work performed and the materials used and installed covered by this report, are in compliance with the approved drawings and specifications and any approved Post Approval Documents/Amended Construction Documents. If applicable, a tentative list of items to be completed or corrected is given herein below or attached hereto. This list may not be all-inclusive. Failure to include an item in it does not alter the responsibility of the Contractor/Builder to complete all of the work in accordance with the approved drawings and specifications and all applicable building codes. (*As defined in CCR, Title 24, Part 1, Section 7-151)

7-151 clearly defines what "personal knowledge" means for designers, inspectors and the contractor.

OSHPD Office of Statewide Health Planning and Development

"Observation" vs "Inspection"

- VCRs for inspectors shall use the word "inspection;" the word "observation" is only applicable to DPOR's per 7-151 (and OSHPD field staff 7-147).
- VCRs shall not contain disclaimers or limitations; the IOR is responsible for <u>all</u> aspects of construction. Likewise, the concrete special inspector is responsible for <u>all</u> concrete.
- If IOR responsibility is divided, specific responsibility must be assigned to each individual.



Summary



- Can a lab subcontract work to another lab?
 YES, AS ALLOW PER PIN 58 (<u>OSHPD Approved Agency</u> <u>for Structural Tests and Special Inspections</u>)
 - Subject to same accreditation
 - Lab is responsible for subcontractors work
 - Lab shall maintain a register of all subcontractors
- Are Alternates required to submit VCRs?
 IT DEPENDS ON CONDITIONS. (Consult with RCO as needed)

Office of Statewide Health Planning and Development

- Is EVERY Special Inspector required to submit VCRs? NOT NECESSARLY. Special inspection reports <u>should</u> <u>not</u> be sent to OSHPD <u>unless there exists special</u> conditions that merit this documentation.
- Should all Special Inspection Reports be submitted to OSHPD? Special Inspectors reports <u>should not</u> be submitted to OSHPD <u>unless there exists special</u>, site specific conditions that merit a VCR from a specific individual. (Consult with RCO as needed)

OSHPD Office of Statewide Health Planning and Development

- Does off-site work require the IOR to be present? SOMETIMES. IT DEPENDS ON THE NATURE OF THE OFF SITE WORK. (Consult with RCO as needed)
- Are Delegates required to submit VCRs? YES



• Who contacts special inspectors to request inspection?

THE CODE IS NOT EXPLICIT. HOWEVER, THE IOR HAS FULL RESPONSIBILITY FOR PERSONAL KNOWLEDGE OF ALL SUCH ACTIVITIES. CONSULT PROJECT TEAM FOR CLARITY.

Does the IOR need to be present during on-site special inspections?
 YES

OSHPD Office of Statewide Health Planning and Development

 Is the designer for a pre-approval required to submit VCRs?

NO

 Is the designer for a pre-approval required to make site visits?

NO



What are the most important Take-Aways form today's presentation?

- An OSHPD version of the TIO was updated for the 2019 Code and is posted on the OSHPD website
- The TIO is perhaps the most undervalued tool on any project.
- Proper management of the TIO offers the best chances of project success
- The DPOR is responsible for the TIO plan creation, development, maintenance, monitoring and all administration associated with the TIO program. ...NOT THE IOR.



What are the more important Take-Aways form today's presentation?

- Complete the required Sign Offs along the way. Don't wait until the end of the project.
- Pay close attention to On-Site and Off-Site Special Inspections
- Take note of the Energy Code Requirements.
- Final VCRs and a Signed-Off, Completed, Current, and Approved TIO is required for Project Close-Out



What are the more important Take-Aways form today's presentation?

- ISU is at the beginning stages of developing an eTIO
- ISU is working to resolve ambiguities associated with regulations related to the TIO.



Questions

Part 2



INSPECTION SERVICES UNIT Testing & Inspection Observation Form - Basics & Recent Changes Webinar Questions & Answers

1. If the DPOR files the final compliance report (FVCR), why does the Alternate also have to provide the same FVCR?

The Primary Design Professional and his/her "alternate" may both need to submit VCR documentation depending on how "personal knowledge" is obtained by each of them.

2. Define more what is meant by administer and be responsible for the TIO. We have already this but there still is lack of clarity. Are the DPOR meant to schedule and manage the testing agencies and be onsite for when the testing is performed?

Per 7-141, the DPOR's are responsible for administration of the work of construction, including the testing, inspection and observation program. The DPOR is not required to schedule testing.

3. On what basis are DPOR supposed to be evaluating Special Inspectors qualifications? Writing that in the code is simply transferring responsibility.

Per 1704A.2.1 Special Inspector qualifications, "the approved agencies shall provide written documentation to the building official demonstrating the competence and relevant experience...", Also, per CAC 7-141(g), The inspection program shall also identify all special inspections to be performed on the project along with approved agency and the individual(s) to perform the inspections. The special inspections shall include, at a minimum, those special inspections required by applicable sections of the California Building Standards Code.

4. We have been told in the field that in accordance with Admin Code 7-153(b), (Per Paul Coleman) the interpretation from OSHPD is that ALL RFIs reviewed by OSHPD field CO, regardless of a change, need a DPOR stamp. Can OSHPD please release a formal document (PIN, CAN, etc.) clarifying what qualifies as a non-material change as this extends the liability many DPORs are comfortable with and seems excessive.

The referenced code, CAC 7-153 (b), If the architect or engineer in responsible charge of a project determines that changes to the approved construction documents are necessary that do not materially alter the work, all such changes shall be stamped and signed by the appropriate design professional(s) pursuant to Section 7-115. All changes in the work are subject to concurrence of the Office field staff as to whether or not the change materially alters the work.

It is required that every Non-Material Alteration (ASI, ESI), and ACD are signed by the DPOR. It might happen that in order to assure that construction and documentation are followed by the correct approach for Non-Material Alteration (ASI, ESI), and ACD, the RFIs are reviewed by the Office Field Staff. The RFIs shall have DPOR stamp attached to ASI, ESI or ACD.

For additional examples, refer to 2010 CAN 107.4.

5. Is there a definition for "Administer"? On a small project, the DPOR is not on-site full time and therefore is unable to schedule Approved Agency or Special Inspector, typically relying on the IOR. How is this reconciled?

The DPOR doesn't schedule. The DPOR maintains the TIO program, which includes special inspection (if required).

6. Is the IOR's presence required during offsite fabrication of headwall units that include medical gas components?

Yes.

7. Does the TIO need to include all tests and inspections required by the contract specifications?

Yes.

8. If Special Inspector is performing periodic special inspection, what is the IOR's responsibility to provide inspection oversight?

The IOR needs to monitor, confirm that the scheduled special inspection has been provided. The IOR(s) of record shall maintain field records of construction progress for each day or any portion of a day that they are present at the project site location.

9. If there is ongoing continuous special inspection (i.e. concrete placement), does the IOR need to be present continuously to monitor the special inspector's work or can the IOR perform other inspection request duties on the same project?

The IOR needs to be present.

10. Is there a standard for phased substantial compliance?

Substantial Compliance is for Remodel, Renovations, Maintenance projects, Equipment Replacement.

11. "Best practice" is not standard between Field Officers.

Communication, especially during kickoff meeting, is the key to success.

12. Can you clarify what is meant by the IOR "administering" the TIO. What are they doing that they are not supposed to?

The IOR does NOT manage the TIO. The DPOR is in charge.

13. Will OSHPD be providing specific written requirements for DPOR during construction? Statements eluding to "best practices", "recommend" or "suggest" are pointless and only make the OSHPD process more complicated.

The requirement for the DPOR during construction are listed in the CAC Chapter 7. The Best Practice is only a suggestion. It is up to the DPOR to perform with the best intent and follow the code requirements.

14. What does OSHPD look for in a sample form?

The sample form that OSHPD provides is a guide (as minimum requirements per 1704A.2.4 Report requirement, and CAC 7-149). Always feel free to reach out to us for clarification.

15. If the IOR is performing special inspection or any inspections listed on the TIO, will the IOR's daily report suffice for documenting these inspections or do they need a separate special inspection form for that line item?

Separate, per 1704A.2.4.

16. Will there be a separate TIO form developed for OSHPD 5 buildings? The current TIO form delineates OSHPD 1.

A TIO for OSHPD 5 buildings might be developed.

17. Can the TIO form be modified to include phases? or does each phase require a separate TIO?

We are working on how to improve the TIO form. Remember, the OSHPD TIO form is a tool. The DPOR can have their own TIO form developed.

18. Who should coordinate the IOR's schedule?

The CAC does not provide direction on who is responsible to coordinate the IORs schedule. The IOR, CM, and DPOR may do this during a preconstruction meeting.

19. I have a MacBook Pro and have not been able to fill out the TIO via the TIO.XL form. Has that been changed? If not, can it be changed?

If modifying the Excel TIO, please make sure each sheet you are looking to modify is "unlocked" as follows: Open the Excel Spread Sheet, go to desired tab, click "Review" from the top banner, click "unprotect".

20. Who should the IOR distribute his/her reports to?

IOR shall keep all files required by the CAC on the job until the job is complete and made accessible to OSHPD, and the DPORs. Upon completion the IOR shall submit the files to the hospital governing board.

21. Must material testing labs be listed as approved for ANSI/AMA in a TIO or project documents?

Yes, all proposed testing labs must hold current national or state recognized certification(s).

22. Is the intent "Responsible Contractor" program to expand to other trades (Deferred approval designers for instance)?

Yes, the "Responsible Contractor" may also be considered the Contractor of Record and is responsible for all other "sub-contractors" indifferent of their trades and the quality of work on the job.

23. T-24 compliance forms required for each project are developed by the MEOR during plan development which are completed by the contractor? Correct? The Mech Contractor does not generate these forms?

Yes, the MEOR is not only responsible to identify the test and inspections required on project for the Mechanical system, they are also required to identify which CEC forms are required.

24. Since the IOR does have responsibilities relative to the TIO, could "administers" the TIO be defined?

The DPOR is responsible for the TIO plan creation, development, maintenance, monitoring and all administration associated with the TIO program. The IOR should work closely with the DPOR to report on the status of tests and inspections required by the project TIO. This includes reporting when TIO items are completed so that the DPOR has "personal knowledge" of the TIO status throughout the project. The IOR should keep complete and organized records of test and special inspection reports on site and available to the DPOR and OSHPD field staff for review.

25. Where are Continuous and Periodic special inspections noted on the existing TIO form?

Continuous and periodic inspections are not identified on the TIO, however, if the DPOR chooses to, she/he may identify such inspections in Section F "Construction Verification". Continuous and periodic inspections are typically found within the statement of special inspections and are found on the approved construction documents. Additionally, the DPOR may choose to develop their own TIO that encompasses all the requirements of the CAC, different than the one provided by OSHPD.

26. Occasionally it is quite difficult to reach field staff for clarification. Does the ISU provide support or arbitration?

ISU, Field Staff, and Office Staff are components of one OSHPD team. ISU is committed to working hard in support of the Field Staff and working with stakeholders to assure success of all construction projects for the hospitals. ISU will never intentionally interfere with the ongoing process in the field. We defer to the Field Staff, because they are the ones that know the project in

detail and have a comprehensive understanding of the project team culture and organization; they have knowledge of what is going on in the project.

27. An IOR told me he wasn't required to provide a FVCR. Ever true?

Incorrect, please refer to CAC Section 7-151(c).

28. TIO is reviewed during Plan Check; however, contractor is frequently not selected until the project is OSHPD Approved. What are the provisions in the new TIO form process to allow for TBD items?

The current version of the TIO does not provide for TBD items but it may be modified by the DPOR to allow TBD items such as identification of contractors after the project is approved by OSHPD.

29. For a hospital site projects, do medical devices (MRI, CT etc.) need to be selected with manufacturer OSHPD pre-approval or can testing be performed by the contractor.

No, medical devices do not need to be selected with manufacturer OSHPD pre-approval. Testing may be done by the approved agency onsite to determine compliance with the codes, approved construction documents and specifications.

30. Does the administrative code require the approved designers to visit the site personally or does it allow them to defer the site visits to others?

Yes, the DPORs shall visit the site and rely on the reporting of others. Refer to CAC 7-151(b).

31. Unique to the IOR role, it seems that if we lose an IOR during a project there is no quick way to have a fill in, and work is supposed to stop as soon as we don't have an IOR. We have met resistance in the past when trying to submit an alternate IOR for projects at the time of permit. Would OSHPD consider accepting an alternate IOR for projects when submitted?

Yes, although it is suggested that all proposed IORS be submitted for approval prior to construction during the plan approval stage. Proposed IORs may be those IORs who you anticipate be used as substitutes or replacement IORs.

32. In the OSHPD provided TIO excel form, there is no place to include the primary IOR, only a section to include any additional IORs. Can you confirm?

No, "Section G" the TIO provided by OSHPD provides a column where the DPOR may identify the IOR (no specific designation) and a second column to identify the IORs scope of work.

33. Can the milestone be left blank until the start of construction when IOR and team are assembled to discuss their input and re-issue with clouds?

This is a great question. If there are milestones you are unsure of, please be sure to discuss this with OSHPD Field staff i.e. Regional Compliance Officer (RCO), Compliance Officer (CO), District Structural Engineer (DSE) or Fire and Life Safety Officer (FLSO) in your area.

34. Did not know that the TIO form can be customized rather than utilizing the OSHPD form in Excel which is NOT the most efficient way? It does not drop down but manually delete to disappear...etc.

If modifying the Excel TIO, please make sure each sheet you are looking to modify is "unlocked" as follows: open the Excel Spread Sheet, go to desired tab, click "Review" from the top banner, click "unprotect". Additionally, the DPOR may choose to develop their own TIO that encompasses all the requirements of the CAC, different that the one provided by OSHPD.

35. VCR usually tracks the milestones in the TIO right? If so can the milestone in the TIO be withheld until construction start where IOR and project manager can have their input and be added?

No, at least one milestone shall be identified on the TIO, but milestones may be added as the project continues. The DPOR will identify what additional milestones are required on the project, the participants may be required to submit VCRs. If there are milestones you are not sure of, please be sure to discuss this with the Regional Compliance Officer (RCO) in your area.

36. Is PIN 58 effective for projects under code cycles prior to 2014?

Yes.

37. If a CO requests a VCR regarding a specific item in the project that is not listed in the TIO as a milestone, does the TIO need to be updated accordingly to log all VCR issues?

All VCRs shall be submitted to the office at the intervals or stages of the work as stated in the TIO Program per 7-151(e). Although not required by CAC, it's not a bad idea to update the TIO Program when the special VCR(s) is/are requested by the RCO, CO, FLSO or DSE. The TIO Program may be updated as a non-material altering change during construction.

38. May a list of Special Inspectors from the Approved Agency be approved for a project?

Yes, and to be attached to the TIO Form. The DPORs to review the List of proposed special inspectors and to obtain OSHPD Field Staff's concurrence prior to start of the specific task.

39. Does the TIO need to identify IOR for vacation coverage +/- 2 weeks?

Additional IOR(s) and his/her responsibility(ies) should be identified on the TIO Section G. Be sure to consult with the RCO in your area for approval of the additional IOR(s).

40. Why signatures instead of 'X' on Section J when we submit VCR for all Milestones and Final already with signatures? Duplicative work effort.

Section J is the Summary of Changes, when the TIO Program requires revision(s). The change of requiring signatures from the Architect/Engineer of Record (and the SEOR) instead of the previous 'X' marks is to confirm the Record(s) acknowledged the changes and the changes aren't by others.

41. Is it acceptable for the SEOR to delegate site observations to someone with a different license (Arch, ME, EE, or CE) for certain types of work?

No. Architects or engineers licensed in the appropriate branch of engineering shall be responsible for the administration of the work of construction (including field observations to obtain personal knowledge) as permitted by their license.

42. Does the DPOR refer to an individual or is it extended to individual's representatives (i.e. supervised staff)? If it allows for more than an individual, how far does this limitation extend?

DPOR = Design Professional of Record, an individual. The other individual(s) are the Alternate(s), provided such persons are architects or engineers qualified under the regulations to assume the responsibility assigned.

43. Could a PE under the supervision of the SEOR represent the SEOR for site observations?

Although the PE under the supervision of the SEOR may represent the SEOR for site observations, he/she is not the Alternate hence could not make any changes to the approved construction documents and the SEOR is required to conduct field observation to obtain "personal knowledge" as defined by H&SC.

44. Does a demolition project requires signing off by the DSE?

It depends on the scope of the project. It should be discussed during the kick-off meeting and to engage the field staff. The assigned field staff (CO, DSE and FLSO) and their contact information may be found on OSHPD's website.

45. Do the ACO or DSE need to approve DPOR's responses to RFIs?

True RFIs (Request for Information/Interpretation) do not require OSHPD's review, however the RFI process is being used for changes. 2013 CBSC projects require OSHPD's concurrence for non-material altering (NMA) changes hence it'll require the field staff to review all RFIs resulting in changes. NMA changes for 2016 and 2019 CBSC projects may proceed, however all changes in the work are subject to concurrence of the Office field staff as to whether or not the change materially alters the work. Therefore, it's good practice to discuss the RFI review process with the field staff during the kick-off meeting.

46. Can IOR do virtual inspections or verifications?

No. Inspection requires the presence of the IOR at the construction site.

47. is a statement of special inspection always required or just for large projects?

The Statement of Special Inspection is required for all projects, to identify the type and extent of each special inspection and additional requirements. See CBC 1704A.3.1 for Content of statement of special inspections.

48. Are the DPORs now required to submit IOR application information already included in the electronic BP application as opposed to IORs providing a written and signed IOR app form?

No. The IOR Application Form shown in the presentation is required when the Building Permit application is being submitted via a hard copy.

49. For the VCRs, are we required to have separate VCRs for each milestone, or can they be combined on one form?

Each milestone (interval or stage) shall have a separate VCR.

50. If a special inspector performs and completes all of their responsibilities as part of a milestone (such as welding or water resistive barrier coating and provides a VR for that work or that milestone, do they also have to provide a FINAL VR at the end of the project?

If the special inspector's responsibilities is for the specific milestone only, his/her VCR for the milestone is his/her final VCR.

51. We are told that the DPOR has control and responsibility for the TIO and how it is "designed" but we find that field staff feel otherwise and end up forcing additional milestones throughout construction. Please help define when a separate milestone is or is not truly necessary. Slab pours are one that we're told we have to have ALL related VR's in place and signed before a pour can proceed but the sequencing of the pours and extent of them is means and methods. This disparity in control leads to frantic scrambling and re-writing of milestone scope and extent to get field staff approval to proceed with each pour - no matter how large or small. Is this really necessary? When does project scope just simply get inspected and accepted and when is a milestone TRULY needed?

Additional VCRs may be required especially when phasing is specified, it's ideal to discuss the intervals and stages with the field staff during the kick-off meeting.

52. Commentary for Section F states. "Verified Compliance Reports are usually required at occupancy so "Occupancy" is pre-printed in Section D." Is the term "occupancy" intended to apply to a space? A piece of medical equipment? An electrical panel? Define when "Occupancy" does or does not apply. If the use or occupancy was not changed or the area was never vacated, is there still a certificate of occupancy issued in accordance with CBC 111?

The verbiage is changed to align with AB 2798 (eff on Jan 1, 2019). A Certificate of Occupancy is only applicable when construction reaches a point of compliance that occupancy by staff is deemed safe and appropriate and shall only be used for New Buildings, Additions and Changes of Occupancy. A new definition of Substantial Compliance will be introduced in the CBC/CAC. Substantial Compliance is a stage of a construction or building project, or a designated portion of the project, that is sufficiently complete in accordance with the approved construction plans and the California Building Standards Code such that the owner may use or occupy the building project, or designated portion thereof, for the intended purpose. The new Certificate of Substantial Compliance shall be issued for all projects that involve Remodels/Renovations, Maintenance and Equipment Replacement Projects. We will update the Instructions for the 2019 TIO Form.

53. Part F TIO Form:

a) Instructions state that VR's are needed at "Project Completion" - but "Project Completion" is not a pre-populated milestone.

b) The terms Staff and Stock, Substantial Completion and Construction Final are not defined in the CAC or in the TIO instructions. How is OSHPD defining them? Is the definition intended to match the owner / contractor agreement?

a) Yes, we'll update the Instructions for the 2019 TIO Form. Project Completion has been changed to Construction Final, to align with AB 2798. A minimum of one VCR is required hence if the project does not contain interval or stages, DPOR should mark the appropriate boxes of the project participates. b) Substantial Compliance and Construction Final are defined per AB2798. Discuss with the Field Staff when Staff and Stock will be requested.

54. What delegates have to submit a VCR? P-tube? Elevator? Seismic Anchorage?

Delegates are the Records of the project hence a minimum of one VCR is required per delegate. If the project has delegates for P-tube, elevator and seismic anchorage, all three delegates are required to submit a VCR.

55. Can video, virtual imaging and test report documentation, be acceptable for inspection purposes on small, isolated SOW, i.e. anchorage bolts?

No. Inspection requires the presence of the IOR at the construction site.

56. Regarding VCR/FVCR, does the primary DPOR need to also need provide VCR's if the Delegate has been the primary "delegated" professional on the project?

All "delegates" must complete and submit VCRs for work for which they are the responsible professional. The Primary designer and his/her "alternate" may both need to submit VCR documentation depending on how "personal knowledge" is obtained by each of them.

57. TIO form for OSHPD-2 changed as well?

Yes. The TIO form for OSHPD-2 projects has been changed and is posted on the OSHPD website.

58. A little off topic, but it would be terrific if OSHPD set the standard for disciplines to Increments. It would be great for All with and involved with OSHPD in the Office, Field to know that the envelope is always INC 3, Superstructure INC 2, etc. Across the board, Design Professionals are not consistent.

Excellent point. We will look into this possibility. However, please be advised that OSHPD cannot and should not make requests of the project stakeholders that is not prescribed in the code. I suspect the eTIO will have to bring clarity in this regard.

59. If line items on a TIO are not used, does the entire TIO need to be revised or can the words NA or a line across the line item be adequate

It is the designer's prerogative to organize the TIO in any way he/she chooses. The excel form allows a consolidation of only relevant tests and inspections. The PDF form would require some edits as you have described. The goal for all of us should be to make things as clear as possible.

60. If a permit is issued as Contractor, and a portion of the scope is chosen to be separated out and performed by the owner, would we need to add/supplant for Owner Builder for that specific portion of the work in order to provide proper VRs? Even if the separated portion is very small (200 sq. feet of ceiling installation)?

Each project can only have one Contractor or Owner Builder. Each entity could choose to subcontract to the other if they so desire but ultimate responsibility will be that of the primary contractor for the project. The alternate to this is a distinct and separate project.

61. I understand the Design Professionals are responsible for the TIO. Once all tests and inspections are complete and documented, Design Professional Observations are complete, and Verified Compliance forms are complete, does the DPOR need to meet with the ACO/DSE to close out the project or can the IOR do that?

This is left to the discretion of the Design Professional in Responsible Charge. If he/she and the IOR agree that this approach is preferred, there is nothing in the code that would prohibit this practice. However, the DPOR should recognize that the IOR does not have authority to make changes to it and may need the DPOR to respond to questions asked by the field staff. In may be in his/her best interest to participate in the process.

62. In response to Joe's answer about delegating "structural" issues. Let's say there is one piece of equipment with four anchors in a slab. The anchors have been tested. Why can't the SEOR rely on the architect's photos and observation.

The code does not distinguish between the nature of work as used in this example. It does require the delegate of the work to have "personal knowledge" that is obtained, in part, by field observation.

63. Question on the process for TIO signoff - currently understand process is for OSHPD field staff to review all tests and inspections page by page by TIO line item. DPOR, SEOR, IOR, Contractor all present for review of thousands of pages. Is this the intended method or best practice for TIO signoff. Is this the best use of DSE time reviewing daily reports?

Each line in the TIO is not intended to be a page by page review of the back-up special inspection and test reports for each TIO item. SEOR, DPOR responsible for review of reports, deficiencies, and issue verified reports, IOR is responsible to also sign verified reports and sign TIO. Given the above DSE or ACO would typically have enough to sign line item. However, if on a specific job there were issues with IOR not doing his job or keeping records, the field staff may request more thorough review, but should be considered unusual and not normal procedure. Also, if a TIO is managed along the way and not only addressed at the end of a project, the reviews can be much more manageable.

64. Can a VCR be signed off based on IOR reports instead of site visits for small scopes such as pipe bracing?

The code requirements for TIO and VCRs do not change based on the size of the project. It does require the delegate of the work to have "personal knowledge" that is obtained, in part, by field observation.

65. If OPM is used, VCR still required?

Yes. Pre-approved designs do not eliminate the requirement for VCR documentation.

66. Is the intent to have Special Inspectors write separate reports if they are assigned to one project covering multiple TIO special inspections?

This can be completed in any manner that is acceptable to the design professional and is clear regarding the inspector's conclusions with all requirements made within the report as defined in the administrative code. See 1704A.2.4.

67. Can the supervising engineer of a testing lab or inspection firm sign the VRs in lieu of the actual technician who performed the test or inspection?

Yes. However, there may exist special conditions and/or circumstances that merit a report from a specific individual. However, this is not standard procedure unless required by the DPOR for some reason. Consult the field staff and the RCO in your region for special conditions that might fall into this category.

68. It appears that the SEOR is now required to approve ALL changes regarding the TIO (regardless if they are structural in nature or not). This assumption is based on the statement noted in Section H and the requirement Section J for the SEOR to initial all changes to the TIO. Is that correct, even though it is not our area of expertise to be familiar with the TIO requirements for other disciplines.

The SEOR is only required to approve all changes to the TIO that are within his/her discipline, structural engineering. If there is no structural work on a project, there may be no structural engineer involved and those areas of the TIO form identified for SEOR initials are expected to remain blank or marked NA (Not Applicable).

69. Field ACO requires every special inspection report to also include a Verified Compliance Report as a cover sheet. Is this an OSHPD requirement? If not, can we cease this practice, so we do not have dozens of Verified Compliance Reports that are NOT associated with a TIO Milestone?

Under normal conditions, it is not required for a special inspector to submit VCR for each and every inspection. However, there may exist special conditions and/or circumstances that merit such reporting. We defer to the Field Staff in these cases as they are the OSHPD representatives that know the project details and have the best understanding of the project team culture and organization. The field staff and the RCO for the project should be consulted for direction on specific projects.

70. Can you please clarify "administer" the TIO? This means DPOR needs to fill out what needs to be done, and by whom, but it is the IOR who is confirming these items are completed and signed off, correct?

The DPOR is responsible for the TIO plan creation, development, maintenance, monitoring and all administration associated with the TIO program. The IOR should work closely with the DPOR to report on the status of tests and inspections required by the project TIO. This includes reporting

when TIO items are completed so that the DPOR has "personal knowledge" of the TIO status throughout the project. The IOR should keep complete and organized records of test and special inspection reports on site and available to the DPOR and OSHPD field staff for review.

71. Did he say special inspection is required for anything that is to be "installed per manufacturer's requirements / specifications"?

It is at the discretion of the DPOR to decide which tests and special inspections will be required on the TIO that exceed those required by the building code as a minimum.

72. When adding project milestone in Section F, are we required to insert every test and inspection into that section per milestone?

No. It is not required nor expected that each test and inspection identified on the TIO will also define a project milestone. It is at the discretion of the DPOR to organize the milestones in a manner that best addresses the project scope and complexity.

73. If an approved agency is OSHPD pre-approved, do they have to still submit blank copies of their daily reports to the DPOR and OSHPD? If they alter their reports, do they have to resubmit them to OSHPD maintain pre-approval?

Regardless if an approved agency has been pre-approved through the OSHPD OPAA program, completed tests and special inspector reports must be organized and maintained on site by the IOR and available to the DPOR and OSHPD field staff. Approved agencies with OPAA pre-approval need not submit sample reports prior to field acceptance of the TIO program. See Section I of the OSHPD TIO form. Changes of OPAA approved agency forms should be coordinated through the OSHPD OPAA program manager. Changes to completed tests and special inspection reports should be coordinated with the DPOR.

74. Does a special inspector have to submit a VCR for every single daily report that they submit? Would a VCR be required for a special inspector who is ONLY sampling concrete for a concrete pour?

Under normal conditions, it is not required for a special inspector to submit VCR for each and every inspection. However, there may exist special conditions and/or circumstances that merit such reporting. We defer to the Field Staff in these cases as they are the OSHPD representatives that know the project details and have the best understanding of the project team culture and organization. The field staff and the RCO for the project should be consulted for direction on specific projects.

75. If Alternates are allowed to sign and seal, can they sign TIO's instead of DPOR?

Either the primary design professional or his/her "alternate" may sign the TIO. However, conditions may exist that require both the primary design professional and his/her "alternate" to

submit VCR documentation depending on how "personal knowledge" is obtained by each of them. The field staff and the RCO for the project should be consulted for direction on specific projects.

76. With requirements for DPOR signatures on TIO, it exasperates the often poor quality of scanned documents. Can TIO be phased by milestones so new TIO forms are created every so often on large, long duration projects?

Yes. It is at the discretion and judgment of the DPOR to organize the TIO for phased projects in any way that adequately addresses all the minimum code required tests and special inspections defined in the code.

77. I was wondering if you could provide the slide show from today's webinar How to Use the TIO. It was very informative. A lot of information, really quickly.

Only PDF formatted versions of the presentation are available. PPT and audio / visual recorded formats are not available.

78. My question regarding the TIO is how to do Delta revisions to the TIO and how do you use Section J? Those weren't covered I today's webinar, however since you discussed that a DPOR can use their own document perhaps this is not hard/fast rule. My question comes up in regard to adding Testing and Inspections after the TIO is combined and printed and approved by OSHPD. There are no extra lines that appear in the Sections to fill with new tests and inspections. Do you suggest leaving a few extra blank lines to be filled later with inspections added? Or is this where Section J comes in to play?

It is the DPOR prerogative to how this is achieved. A DPOR may decide to create blank rows to be used in the excel form or the DPOR may choose to add supplemental pages. How this is organized is not regulatory.

79. During today's webinar Q&A session it was stated that the DPOR is required to read every daily inspection report produced by the IORs "per code," can you please let me know what code section, PIN, or CAN this is?

The California Administrative Code Section 7-141(i) provides direction to the DPORs to "...verify that the work is in compliance with the approved construction documents in accordance with the requirements for personal knowledge as it applies to each participant."

Personal knowledge as applied to the licensed architect or engineer in CAC Section 7-151, references Health and Safety Code Section 129830 which states, "...means the personal knowledge that is obtained by periodic visits to the project site of reasonable frequency, for the purpose of general observation of the work, and that is also obtained from the reporting of others as to the progress of the work, testing of materials, and inspection and superintendence of the work that is performed between the periodic visits of the architect or the registered engineer. Reasonable diligence shall be exercised in obtaining the facts."

DPORs are not required to read the daily reports on a daily basis, but they are required to have personal knowledge of the project by periodically visiting the project and by knowledge obtain by the reporting of others i.e. IORs and their daily reports.

80. Is the Special Inspector required to attach a VCR to each inspection submitted during a project?

A special inspector is not required to submit a VCR for each inspection unless there exists special circumstances that merit such reporting. OSHPD field staff should be consulted for special circumstances.

81. Will you have training for just updating the TIO during construction?

Great suggestion. ISU has no immediate plans for this type of training but will include this in our ongoing list of topics for future webinars. We welcome suggestions like this that help our Unit best understand what is needed in the field during construction.

82. Can you please send me a link to the Webinar that was held of May 6th? I want to share this webinar with my co-workers and can't find it on your website. Thank you so very much. I know you are having the same class later this month BUT they are working during that weekday midday time....so having it taped so they can review early morning or at night is what they are requesting.

The webinar will be available in PDF format only. PPT format or recorded formats are not available at this time.