	PROJECT	Standby SRU & Additional Tanks IOCL Paradip Refinery		
	CLIENT	INDIAN OIL CORPORATION LIMITED		
QCP-FIRE PROOFING	Project No. 080557C001	Document No. 080557C-000-QCP-1740-001	Rev. No. A	Page 1 of 3

## QUALITY CONTROL PLAN

### CIVIL WORKS

### FIRE PROOFING

TYPE OF QUALITY CONTROL REPORT	CERTIFICATION EXTENT
W 12/A - CW 15A	SINGLE REPORT PER EACH MATERIAL – CONCRETE MIX DESIGN
CW 60A - CW 60	SINGLE REPORT PER EACH ITEM
CW 35 - CW 17	SINGLE REPORT PER EACH ITEM

#### REFERENCE DOCUMENTS:

- 080557C-000-PP-805 SITE CO-ORDINATION & COMMUNICATION PROCEDURE
- 080557C-000-JSS-1800-003 SPECIFICATIONS FOR FIRE PROOFING OF STEEL STRUCTURES
- 080557C-000-JSS-1700-005 SPECIFICATIONS FOR MATERIALS OF CIVIL STRUCTURAL WORKS
- Drawings



#### LEGENDA

H	=	HOLD (RFI required - Work stop for inspection)
W	=	WITNESS (RFI required)
WC	=	100 % SUPERVISION AND EXAMINATION BY CONTRACTOR.
P	=	PREPARATION.
S	=	SURVEILLANCE (No RFI)
R	=	REVIEW OF REPORTS
N.A.	=	NOT APPLICABLE
A	=	AUTHORIZATION / APPROVAL
IFA	=	ISSUED FOR AUTHORIZATION/APPROVAL
INFO	=	FOR INFORMATION
!	=	WARNING (control of document revision status)

A	21/10/2019	ISSUED FOR INFORMATION	SMP	PKP	LA/ANJ	JMC
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED

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	<b>CLIENT</b>		<b>INDIAN OIL CORPORATION LIMITED</b>	
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## QUALITY CONTROL PLAN

### CIVIL WORKS



### FIRE PROOFING

## QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
<b>A)</b>	<b>PRELIMINARY ACTIVITIES</b>				
A.1	CONTRACTOR DRAWINGS CHECK REVISION STATUS	N.A.	!	!	
A.2	CONTRACTOR TECHNICAL SPECIFICATION AND PROCEDURE	N.A.	!	!	
A.3	SPRAY MATERIAL MFR INSTRUCTIONS (IF ANY)	N.A.	WC	INFO	(1)
A.4	CONTRACTOR METHOD STATEMENT (IF REQUIRED)	N.A.	P	R	(1)
<b>B)</b>	<b>BEFORE APPLICATION</b>				
B.1	CONCRETE MIX DESIGN APPROVAL	CW15A	WC	INFO	(1) (1)
B.2	MATERIALS APPROVAL	W12/A	WC	INFO	(2)
B.3	MATERIAL'S IDENTIFICATION AND CONSERVATION STATUS	N.A.	WC	S	
<b>C)</b>	<b>CONCRETE FIRE PROOFING (CAST IN SITU)</b>				
C.1	CLEANING SURFACE AND REINFORCEMENT SUPPORTS	CW60A	WC	S S	
C.2	REINFORCEMENT	CW60A	WC	W/R	
C.3	FORM WORK INSTALLATION	CW60A	WC	S	
C.4	CONCRETE CASTING	CW60A	WC	R	
C.4.1	SLUMP TEST & AIR CONTENT TEST (IF REQUIRED)	CW35 / CW60A	WC	R	
C.4.2	SAMPLE STRENGTH TEST (IF REQUIRED)	CW17 / CW60A	WC	S	
C.5	FORMWORK REMOVAL	CW60A	WC	S	
C.6	CONCRETE SURFACE REPAIR (IF NECESSARY)	CW60A	WCC	S	
C.7	TOP COATING APPLICATION	CW60A	WC	S	
C.8	CAULKED WATERPROOF	CW60A	WC	W/R	
C.9	FINISHING WORK	CW60A	WC	R	
C.10	STRENGTH TEST RESULT & SAMPLE UNIT WEIGHT (IF REQUIRED)	CW17 / CW60A	WC		
C.11	FINAL DOCUMENTATION REVIEW	CW60A			
<b>D)</b>	<b>FIRE PROOFING SPRAY SYSTEM</b>			S	
D.1	CLEANING SURFACE AND REINFORCEMENT SUPPORTS	CW 60	WC	S	
D.2	REINFORCEMENT	CW 60	WC	S	
D.3	WEATHER CONDITIONS & SPRAY MATERIAL APPLICATION	CW 60	WC	S	
D.4	SUPERFICIAL SMOOTHING	CW 60	WC	W/R	
D.5	THICKNESS CHECK	CW 60	WC	S	
D.6	TOP COATING APPLICATION	CW 60	WC	W/R	
D.7	FINISHING WORK	CW 60	WC	R	
D.8	FINAL DOCUMENTATION REVIEW	CW 60	P		

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NOTES: (1) A COPY OF THE DOCUMENT WILL BE DELIVERED TO OWNER FOR INFORMATION  
(2) MATERIAL APPROVAL WILL BE EXECUTED ONLY FOR MATERIAL SUPPLIED BY CONTRACTOR

#### GENERAL NOTES

- 1 THE ENCLOSED ITP'S ARE INDICATIVE AND SHALL BE FOLLOWED FOR DEVELOPING THEJOB SPECIFIC ITP'S FOR THE WORKS TO BE PERFORMED BY THE CONTRACTOR. THE PROVISIONS INDICATED FOR STAGE WISE INSPECTION BY TECHNIP AND OWNER (FOR SPECIFIC ACTIVITIES) ARE THE MINIMUM AND THE ENGINEER-IN- CHARGE MAY DECIDE TO INCREASE HOLD POINTS/ WITNESS POINTS, WHILE APPROVING THE JOB SPECIFIC ITP'S. ACTIVITIES FOR WHICH ITP'S ARE NOT PROVIDED IN THIS SPECIFICATION. CONTRACTOR TO DEVELOP AND GET THE SAME APPROVED BY TECHNIP/OWNER BEFORE START OF THE WORK. IN GENERAL ROLE OF TECHNIP HAS BEEN SPECIFIED IN THE DOCUMENT THE ROLE OF OWNER TO BE SPECIFIED DURING PREPARATION OF SITE SPECIFIC ITP'S.
- 2 CONTRACTOR TO SUBMIT JOB SPECIFIC REPORTING FORMATS AND JOB PROCEDURES FOR THE JOBS FOR EACH ACTIVITY LISTED IN THE ITP'S AND SUBMIT TO TECHNIP/OWNER FOR APPROVAL. BEFORE COMMENCEMENT OF THE ACTIVITY. IF THE CONTRACTOR HAS TO DEVIATE FROM THE GIVEN ITP FOR A VALID REASON, HE SHALL OBTAIN PRIOR WRITTEN APPROVAL OF TECHNIP/OWNER. CONTRACTOR TO CARRY OUT 100% EXAMINATION OF ALL ACTIVITIES.



PROJECT:

COMPANY:

QUALITY CONTROL FORM

CW 15 A

PROJ. No.:

QCF REV. 0

SH. 1 OF 1

**CONCRETE MIX DESIGN APPROVAL**

CONTRACTOR:

CW 15 A N° \_\_\_\_\_

1. MIX DESIGN N°

2. SPECIFIED CONCRETE STRENGTH (28 DAYS)  
(CONCRETE CLASS)

3 MIX DESIGN CONCRETE STRENGTH (28 DAYS)

4. MIX DESIGN CONCRETE SLUMP

5 CEMENT TYPE

6 ADMIXTURES

7. PURPOSE

8. BATCHING PLANT

9. ATTACHMENT DATA

REMARKS:

RESULT:

ACCEPTED

☐

NOT ACCEPTED

☐**INSPECTORS****CONTRACTOR****TECHNIP****OWNER**

NAME

SIGNATURE

DATE



PROJECT:

COMPANY:

QUALITY CONTROL FORM

CW 17

PROJ. No.:

QCF REV. 0

SH. 1 OF 1

## CONCRETE SAMPLE COMPRESSION TEST

CONTRACTOR:

CW 17 N° \_\_\_\_\_

## SAMPLE DATA

SAMPLE NR	ITEM	AREA	CONCRETE		SAMPLE DATE	CASTING TEMPERATURE (C)	ADMIXTURE TYPE & DOSAGE	REMARKS
			CLASS	MIX DESIGN				

## TEST RESULT

SAMPLE NR.	AGE AT TEST (DAYS)	RESULT			ATTACHED QUALIFIED LABORATORY TEST RECORD N° & DATE		REMARKS
		STRENGTH	ACC.	UNACC.			

TEST RESULT: ACCEPTED ☐NOT ACCEPTED ☐

INSPECTORS

CONTRACTOR

PMC

OWNER

NAME

SIGNATURE

DATE



COMPANY:

**CW 35**

SH. 1 OF 1

## CONCRETE SLUMP TEST & AIR CONTENT TICKET REPORT

CW 35 N°

DATE \_\_\_\_\_

CONCRETE MIX DESIGN No.

REMARKS:



NOT ACCEPTED ☐

<b>INSPECTORS</b>	<b>CONTRACTOR</b>	<b>PMC</b>	<b>OWNER</b>
NAME			
SIGNATURE			
DATE			

				PROJECT:					
				COMPANY:					
<b>QUALITY CONTROL FORM                      CW 60</b>				PROJ. No.:		QCF REV. 0		SH. 1 OF 1	
<b>FIREPROOFING: SPRAY SYSTEM SUMMARY REPORT</b>				CONTRACTOR:				<b>CW 60 N° _____</b>	
ITEM _____				AREA _____					
DWGs& REV. _____				SYSTEM _____					
INSPECTIONS (REF. TO QCP 1740.01)			N.A.	ACC.	REMARKS/ REFERENCES		INSPECTORS SIGNATURE & DATE		
							CONTRACTOR	TECHNIP	OWNER
D.1	CLEANING SURFACE AND REINFORCEMENT SUPPORTS		<input type="checkbox"/>	<input type="checkbox"/>					
D.2	REINFORCEMENT		<input type="checkbox"/>	<input type="checkbox"/>					
D.3	WEATHER CONDITIONS & SPRAY MATERIAL APPLICATION		<input type="checkbox"/>	<input type="checkbox"/>					
D.4	SUPERFICIAL SMOOTHING		<input type="checkbox"/>	<input type="checkbox"/>					
D.5	THICKNESS CHECK		<input type="checkbox"/>	<input type="checkbox"/>					
D.6	TOP COATING APPLICATION		<input type="checkbox"/>	<input type="checkbox"/>					
D.7	FINISHING WORK		<input type="checkbox"/>	<input type="checkbox"/>					
NOTES:									
N.A.    =    NOT APPLICABLE                      ACC.        =    ACCEPTED									
<b>D.8) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>		<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>		
	NAME								
	SIGNATURE								
	DATE								

				PROJECT:				
				COMPANY:				
<b>QUALITY CONTROL FORM                      CW 60A</b>				PROJ. No.:	QCF REV. 0	SH. 1 OF 1		
<b>CONCRETE FIREPROOFING SUMMARY REPORT</b>				CONTRACTOR:		CW 60A N° _____		
ITEM _____  DWGs& REV. _____				AREA _____  SYSTEM _____				
INSPECTIONS (REF. TO QCP 1740.01)			N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
						CONTRACTOR.	TECHNIP	OWNER
C.1	CLEANING SURFACE AND REINFORCEMENT SUPPORTS	<input type="checkbox"/>	<input type="checkbox"/>					
C.2	REINFORCEMENT	<input type="checkbox"/>	<input type="checkbox"/>					
C.3	FORM WORK INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.4	CONCRETE CASTING	<input type="checkbox"/>	<input type="checkbox"/>					
C.4.1	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)				
C.4.2	SAMPLE STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)				
C.5	FORWORKS REMOVAL	<input type="checkbox"/>	<input type="checkbox"/>					
C.6	CONCRETE SURFACE REPAIR	<input type="checkbox"/>	<input type="checkbox"/>					
C.7	TOP COATING APPLICATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.8	CAULKED APPLICATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.9	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>					
C.10	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)				
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____    CW 35 N° _____								
N.A.    =    NOT APPLICABLE                      ACC.    =    ACCEPTED								
C.11) FINAL DOC. REVIEW	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>		
	NAME							
	SIGNATURE							
	DATE							



 		PROJECT:	
		COMPANY:	
QUALITY CONTROL FORM <b>W 12/A</b>		PROJ. No.:	QCF REV. 0
<b>CONSTRUCTION MATERIALS APPROVAL</b>		CONTRACTOR:	<b>W 12/A N°</b> _____
CIVIL <input type="checkbox"/>	PIPING <input type="checkbox"/>	MACHINERY <input type="checkbox"/>	INSULATION <input type="checkbox"/>
BLDG. <input type="checkbox"/>	MECHANIC. <input type="checkbox"/>	ELECTRICAL <input type="checkbox"/>	STEEL STR. <input type="checkbox"/>
NDT <input type="checkbox"/>	SUPPORT PRF. <input type="checkbox"/>	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>
1. MATERIALS			
2. SUPPLIER			
3. PURPOSE			
4. ATTACHMENT DATA			
5. TYPE OF TEST PERFORMED			
6. TEST STANDARD UTILIZED			
REMARKS:			
RESULT:		ACCEPTED	NOT ACCEPTED
		<input type="checkbox"/>	<input type="checkbox"/>
<b>INSPECTORS</b>	<b>CONTRACTOR</b>	<b>PMC</b>	<b>OWNER</b>
NAME			
SIGNATURE			
DATE			