

## CASE STUDY CLEANING VERIFICATION/VALIDATION

## SITE EVALUATION GAP/ASSESSMENT CLEANING VERIFICATION/VALIDATION CANCER THERAPIES

United States - Confidential Client

## **PROJECT DESCRIPTION**

Hyde performed a thorough gap analysis of the Cleaning Program for a drug product in short supply that was being manufactured at a contract manufacturing facility under consent decree. Hyde's work on the project involved Hyde CORE Lab studies, cleaning verification program development and execution as well as cycle development and operational qualification.

## SCOPE OF SERVICES PROVIDED Hyde CORE Lab Cleaning Studies

- Cleaning Process Design of Experiments (DOE) Study
- Swab Method Validation
- Surface Swab Recovery Validation
- Visual Residue Limit Study

Developed and executed comprehensive cleaning verification program that incorporated the following:

- Surface Area Calculations / Maximum Allowable Carry-over calculations (MAC).
- Development of acceptance criteria (and, as applicable, alert and action limits) for cleaning.
- Statistical Analysis technical reports of data gathered during verification.
- Protocol development, execution, and summary reports.

	REQUIREMENTS PURE STEAM GENERATOR							
REQUIREMENTS			TM					
URS REQ#	DESCRIPTION	QRA	FAT	SAT	IQ	oq	PQ	
2.	OPERATIONAL REQUIREMENTS							
2.1	Capacity							
1	CSG sized for NL T 5000 lbs/ hr with 3.0-4.5 Bar clean steam pressure distribution, and NMT 8 Bar plant steam pressure at equipment	NCOP	DOC	TEST				
2	Supply Clean Steam to Autoclaves	CPP		TEST				
4	Supply Clean Steam to twelve Air	CPP		TEST				
2.2	Process Requirements							
1	Clean Steam when conde and EU per HTM201/E	COP					TES	
2	Clean Steam condense functions	COP					TES	
13	Clean Steam - Pressu Identifies when testing	COP				TEST		
18	Degasser for Non Cort	CPP	TEST					
2.3	Process Control: will be executed							
1	Automated Unattended O FAT, SAT, IQ, OQ, PQ	NCOP	TEST					
3	CSG shall be controlled and h	NCOP	TEST					
4	Shutdown and Alarm based on Rest	COP		TEST				
2.4	Cleaning							
1	Equipment and piping shall be Cleaned and Passivated after FAT	CPP		DOC				
5	All surfaces contacted by product to be 316L SS 15-20 Ra EP Finish, or S.S. impregnated PTFE ( TefSteel )	CPP	TEST					
3	UL Listing	NCPP	DOC					
9	Instruments Calibrated under periodic program	NCPP			DOC			

