Capital PEC Report Project ID: 30071115

Project Name FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIF

Project Type Brownfield

TIV (USD) 50,000,000

Plant ID 3468628

SIC Code 2836 Biological Products, Except

Industry Code 13 Pharmaceutical & Biotech

Diagnostic Substances

Sector Final Formulation (Oral, Solid, Parenteral, Topical,

PEC Activity Diagram

etc.)

SIC Product 2836\*0035 Cellular and Gene Therapy Products

Status Active Last Update 06-Apr-2022 Initial Release 15-Jul-2021

Environmental Air (A) Water (W) Construction Labor Preference Union, Non-Union

**Operations Labor Preference** Non-Union

Existing Sq. Ft. 165,000 Sq. Ft.

Square Footage Retrofitted/Renovated Sq. Ft. 165,000 Sq. Ft.

Plant Owner Sana Biotechnology Incorporated
Plant Name Fremont Allogeneic T Cell/Viral
Plant Name
Plant Name
Plant Parent Sana Biotechnology Incorporated
Unit Name

Vector/Pluripotent Stem Cell

Location 5567 Cushing Parkway

Phone +1 206 701 7914

City/State Fremont, California 94538 U.S.A.

Zone/County CA\*03, Alameda

Project Responsibility Project Company
Project Director Sana Biotechnology Incorporated
Project Director Sana Biotechnology Incorporated
Project Director Sana Biotechnology Incorporated

One Tower Place Suite 500 Vice President Manufacturing and Supply Chain

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Contracts Administrator Sana Biotechnology Incorporated Tara Ponce

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yokomizo-ponce-15802610

PEC® Timing P2

Project Probability Medium (70-80%)

PEC® Activity Owner Review of Issue

Scope Sana Biotechnology Incorporated performs Owner Review of Issue for Brownfield Allogeneic T Cell, Viral Vector, Pluripotent Stem Cell Plant. DETAILS: On Fremont Industrial Park/Pacific Commons South campus, within 271,840 sqft building, renovate and fit-out approximately 165,000 sqft of newly leased space and equip for the production of allogeneic, or ready-for-patients, off-the-shelf chimeric antigen receptor T cells — known as CAR-Ts — gene therapies and stem cell-derived therapies for clinical trials and early commercial launches. REQUIRES: Building Modifications, Temperature and Humidity Controls, Fire and Security System, Voice/Data/Wireless System, Industrial Gas Supply and Storage, Building Management Systems (BMS), Air/Gas Vacuum System, Hygienic Piping, Single-Use Bioreactors, Chromatography Equipment, Ultra/Diafiltration Equipment (UF/DF), Harvest Tanks, Clarification Equipment, Ultrafiltration Equipment, Sterile Filtration Equipment, Laboratory Stations, Analytical Equipment, Data Recorders, Cryogenic Equipment, Glove Boxes, Cleanrooms (ISO 5-8/Class 100-100,000), Robotics, Refrigeration, Freezers, Cold Rooms, Cell Expansion Tanks, Incubators, Centrifuges, Controls (PLC/DCS), Water-For-Injection System (WFI), Gene Transfer Equipment, Checkweighers, Electrical Panel Upgrades, NGF or Electrical Boilers, Clean Steam Generators, Compressors (Air), Conveyors (Roller/Belt), Aseptic Filling Equipment, Heat Exchangers, Cooling Tower, Chillers, Water Purification System, Bar/Coding/Scanning/Labeling Equipment, Pumps, Motors, Valves. ENVIRONMENTAL: (A) HEPA Filtration System, Fume Hoods, Dust Collectors, Scrubbers; (W) Pre-Wastewater Treatment System.

Schedule Sana Biotechnology Incorporated continues with Owner Review of Issue through 2Q22 (Apr). Sana finalizes Project Team 2Q22 (May). Upon completion of Design and final corporate approvals, Sana with Project Team releases any remaining Equipment RFQs plus Subcontractor Bid Documents 2Q22 (May)-3Q22. Estimated Construction Kick-Off 2Q22 (Jun). Project Completion 1Q23 (Mar).

Details Apr-2022 Project in Owner Review of Issue

Project Milestones

AFE 202204 Sub Bid Doc 202205 Completion 31-Mar-2023 Precision QUARTER

Equip RFQ 202205 Kick-Off 202206 Kickoff Slippage 9 Months Duration 10 Months

Engineering Electrical Environmental HVAC Instrumentation Mechanical Structural Process

Contracting Electrical Environmental HVAC Instrumentation Mechanical Structural General

Project Key Needs Control Room Process Equip Heat

Transfer

[G/C]

Instrumentation Electrical Mechanical HVAC Storage
Piping/Fittings Insulation/Coatings Environmental Valves
Communications Batch Packaging

Process

Material Handling

Matter Phase Liquid Solid

Energy	Boiler	Generator		
Buy				
Sell				
Plant Standard Contacts				
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID		
Plant Manager Craig Lichtenstein	[Phn.] +1 206 701 7914	Apr-2022		
Vice President Manufacturing and craig.lichtenstein@sana.cc Supply Chain	m No	craig-lichtenstein-744177		

Historical Reports				
Project Name	Report Date	TIV	Phase	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	15-Jul-2021	50,000,000 USD	Detailed Design (P1 - 09)	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	03-Sep-2021	50,000,000 USD	Detailed Design (P1 - 09)	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	04-Nov-2021	50,000,000 USD	Detailed Design (P1 - 09)	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	06-Jan-2022	50,000,000 USD	Owner Review of Issue (P2	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	06-Jan-2022	50,000,000 USD	Owner Review of Issue (P2	
FREMONT BROWNFIELD ALLOGENEIC T CELL/VIRAL VECTOR/PLURIPOTENT STEM CELL PLANT	06-Apr-2022	50,000,000 USD	Owner Review of Issue (P2	

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