**Budget Narrative**

1. **Budget Detail**

Total Project Budget Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Costs** | | | | | |
| **CPRG Implementation**  **Grant Request** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| Personnel | $73,236 | $76,165 | $79,212 | $82,380 | $85,676 |
| Fringe | $37,918 | $40,596 | $43,487 | $46,565 | $49,885 |
| Construction & Other Expenses | $1,950,000 |  |  |  |  |
| Indirect Costs | 47,240 | 49,623 | 52,147 | 54,802 | 57,613 |
|  | **Total EPA Request**  $2,826,545 | | | | |

**Expenditures by Quarter, Year 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Oct – Dec  2024 | Jan – Mar  2025 | April – June  2025 | July – Sept 2025 |
| **Federal (EPA Request)** |  |  |  |  |
| Personnel | $27,788.50 | $27,788.50 | $27,788.50 | $27,788.50 |
| Construction & Other Expenses | $900,000 | $525,000 | $525,000 | $0 |

**5 Year Budget Detail**

**EPA Request**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Personnel** | **YEAR 1** | **YEAR 2** | **YEAR 3** | **YEAR 4** | **YEAR 5** |  | **TOTAL** |
| Project Operator @ $73,154/year 0.5FTE with 4% escalation | *38,420* | *39,957* | *41,556* | *43,218* | *44,947* |  | *$208,098* |
| Project Operator @ $73,154/year 0.5FTE with 4% escalation | *17,752* | *18,462* | *19,200* | *19,968* | *20,767* |  | *$96,149* |
| Project Operator @ $73,154/year 0.5FTE with 4% escalation | *17,064* | 17,746 | 18,456 | 19,194 | 19,962 |  | *$92,422* |
| TOTAL PERSONNEL | *$73,236* | *$76,165* | *$79,212* | *$82,380* | *$85,676* |  | *$396,669* |
| **Fringe Benefits** |  |  |  |  |  |  |  |
| *Full time employees @ 51.4%* | *37,918* | *40,596* | *43,487* | *46,565* | *49,885* |  | *$218,451* |
| TOTAL FRINGE BENEFITS | *$37,918* | *$40,596* | *$43,487* | *$46,565* | *$49,885* |  | *$218,451* |
| TOTAL TRAVEL | *$0* | *$0* | *$0* | *$0* | *$0* |  | *$0* |
| **Equipment** | *$0* | 0 | 0 | 0 | 0 |  |  |
| TOTAL EQUIPMENT | *$0* | *$0* | *$0* | *$0* | *$0* |  | *$0* |
| TOTAL SUPPLIES | *$0* | *$0* | *$0* | *$0* | *$0* |  | *$0* |
| TOTAL CONTRACTUAL | *$0* | *$0* | *$0* | *$0* | *$0* |  | *$0* |
| **OTHER** |  |  |  |  |  |  |  |
| *Other Expense – welded tank* | *$1,500,000* |  |  |  |  |  |  |
| *Capital Project Delivery Service, UCD DCM* | *$450,000* |  |  |  |  |  | *$450,000* |
| TOTAL OTHER | *$1,950,000* | *$0* | *$0* | *$0* | *$0* |  | *$1,950,000* |
| TOTAL DIRECT | *$2,061,154* | *$116,761* | *$122,699* | *$128,945* | *$135,561* |  | *$2,565,120* |
| Modified Total Direct Costs | $111,154 | $116,761 | $122,699 | $128,945 | $135,561 |  | $615,120 |
| **Indirect Costs** |  |  |  |  |  |  |  |
| *On-Campus/Other Sponsored Activities F&A (42.5% of MTDC)* | *47,240* | 49,623 | 52,147 | 54,802 | 57,613 |  | *$261,425* |
| TOTAL INDIRECT | *$47,240* | *$49,623* | *$52,147* | *$54,802* | *$57,613* |  | *$261,425* |
|  |  |  |  |  |  |  |  |
| **Requested Amount:** | ***$2,108,394*** | ***$166,384*** | ***$174,846*** | ***$183,747*** | ***$193,174*** |  | ***$2,826,545*** |

1. **Expenditure of Awarded Funds**

The funds will be expended in a manner consistent with EPA and UC Davis protocols. The project team will meet (biweekly) to track project deliverables against the proposed timeline. Equipment bids will be secured early in the process and lead times have been factored into the project timeline. The timeline was developed in collaboration with the equipment vendors and our on-campus Design Construction Management staff to allow sufficient time for project tasks based on previous experience.

Project lead Yonkoski will meet quarterly with the Facilities Management department budget analyst to ensure timely delivery of project tasks are tracking with expenditure of project funds as expected.

1. **Reasonableness of Costs**

**Personnel Costs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | FTE | Annual Salary | Cost Year 1 | Total Project Cost |
| Justin Cunningham (Operator) | 50% | $73,154 | $38,420 | $208,098 |
| Anthony Parra (Operator) | 25% | $67,600 | $17,752 | $96,149 |
| Antonio Machado (Operator) | 25% | $64,980 | $17,064 | $92,422 |

The biodigester operators are instrumental to the success of the project. Lead Operator, Justin Cunningham, will oversee day-to-day activities at the site and coordinate access to the facility by construction crews. Cunningam will also enforce site safety and logistics for visitors. Operators Parra and Machado will support Lead Operator Cunningham with daily responsibilities and unforeseen activities that arise.

Once construction is complete, the operators will undergo training to use the new equipment and will begin operating the facility to process new feedstock and produce electricity from biogas. Such operation will continue for the total project period. The operators will also help collect measurements and data for reporting back to CalRecycle and EPA. In addition, the operators will perform routine preventative maintenance on new equipment to maintian its functionality and corrective maintenance to repair issues in a timely manner. This activity will keep the project on task to reduce greenhouse gas emissions.

**Fringe Benefits**

|  |  |  |
| --- | --- | --- |
|  | Cost Year 1 | Total Project Cost |
| Justin Cunningham (Operator) | $19,892 | $114,602 |
| Anthony Parra (Operator) | $9,191 | $52,951 |
| Antonio Machado (Operator) | $8,835 | $50,898 |

The fringe benefits were calculated based on the established fringe benefits policy of UC Davis.

**Trave**l

None

**Equipment**

None

**Supplies**

None

**Contractual**

None

**Construction**

|  |  |  |
| --- | --- | --- |
|  | Tank Cost | 30% of Equipment Cost |
| Installation of 150,000 gallon welded stainless steel anaerobic digester tank | $1,500,000 | $450,000 |

Installation of the new welded stainless 150,000 gallon tank will be overseen and managed by our in-house UC Davis, Design and Construction Management department. Their standard service rate for

Capital Project Delivery is 30% of the equipment cost. Tank will be purchased and installed in Year 1 of the project. The 30% service rate includes project management, construction management, inspections, construction administration, contract services, overhead, and contingency.

**Other**

|  |  |  |
| --- | --- | --- |
|  | Cost Year 1 | Total Project Cost |
| 150,000 gallon welded stainless steel anaerobic digester tank | $1,500,000 | $1,500,000 |

Tank 1 at the READ Facility is 150,000 gallons, made of carbon steel and has developed a leak which can no longer be repaired. We received a quote from Chicago Bridge and Iron to replace and upgrade the tank with a 150,000 welded stainless steel tank for $1,500,000, installed.

**Indirect Charges**

|  |  |  |
| --- | --- | --- |
|  | Year 1 | Total Project |
| TOTAL DIRECT COSTS | $2,061,154 | $2,565,120 |
| Modified Total Direct Costs (MTDC) | $111,154 | $615,120 |
| TOTAL INDIRECT COSTS  (42.5% of MTDC) | $47,240 | $261,425 |

Indirect costs are calculated using the federally negotiated rate for On-Campus, Non-Research, Sponsored Activities at UC Davis. For the project period the Facilities & Administrative Rate is 42.5%, applied to Modified Total Direct Costs (MTDC). MTDC includes all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts. MTDC excludes equipment and capital expenditures.

**Funds Under Review**

A total of approximately $7.5 million is needed to make upgrades and necessary repairs to the READ Facility. The READ Facility team has an award under review with CalRecycle that would support the upgrades needed for the feedstock processing equipment and to purchase a gas engine generator. This award along with this request from the EPA for $2,826,545 to replace Tank 1 at the facility will achieve the GHG reductions estimated at 12,096 MTCO2e from 2025-2030, and 52,416 MTCO2e from 2025 to 2050.