CHAPTER 2

PROJECT DESCRIPTION

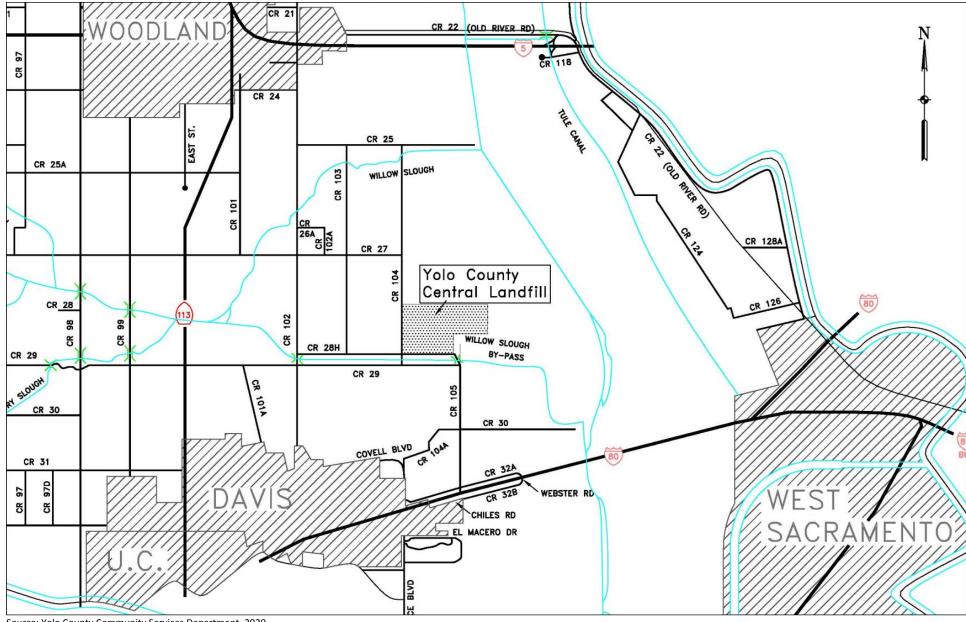
2.1 BACKGROUND

The Yolo County Central Landfill (YCCL) is a municipal solid waste facility located in unincorporated Yolo County about two miles northeast of Davis, and five miles southeast of Woodland, near the intersection of Roads 28H and 104 (see **Figure 2-1**). The YCCL is owned by Yolo County and operated by the County's Department of Community Services, Division of Integrated Waste Management (DIWM); it has been in operation since 1975. The landfill is open seven days per week, accepting non-hazardous municipal solid waste (MSW), green waste and food waste, construction and demolition debris, liquid waste, and recyclables from both incorporated and unincorporated areas of Yolo County. YCCL is permitted to accept up to 1,800 tons per day (TPD) of waste. In recent years, average daily throughput has exceeded 1,000 TPD.

The site covers 725 acres (Assessor's Parcel Numbers 042-140-001, 042-140-002, and 042-140-006) and includes several discrete areas, totaling 473 acres, that are permitted for disposal. These include seven Class III landfill areas for disposal of MSW (designated as Waste Management Units [WMUs] 1 through 7) and four Class II surface impoundments for holding liquid wastes. The site also includes one existing composting facility and one under development, a construction, demolition and inerts debris (CDI) recycling facility, areas for metal, wood, and inert material (concrete, rock, etc.) recovery and recycling, and a permanent household hazardous waste collection facility. Five of the Class III landfill areas (WMUs 1-5) have undergone final closure. WMU 6 is operational now and includes eight 20-acre modules (100 acres are active, and 60 acres remain to be developed). WMU 7 is approved for future development and consists of eight modules (160 acres total). The current layout of the landfill is shown in **Figure 2-2**.

2.2 PROJECT ELEMENTS

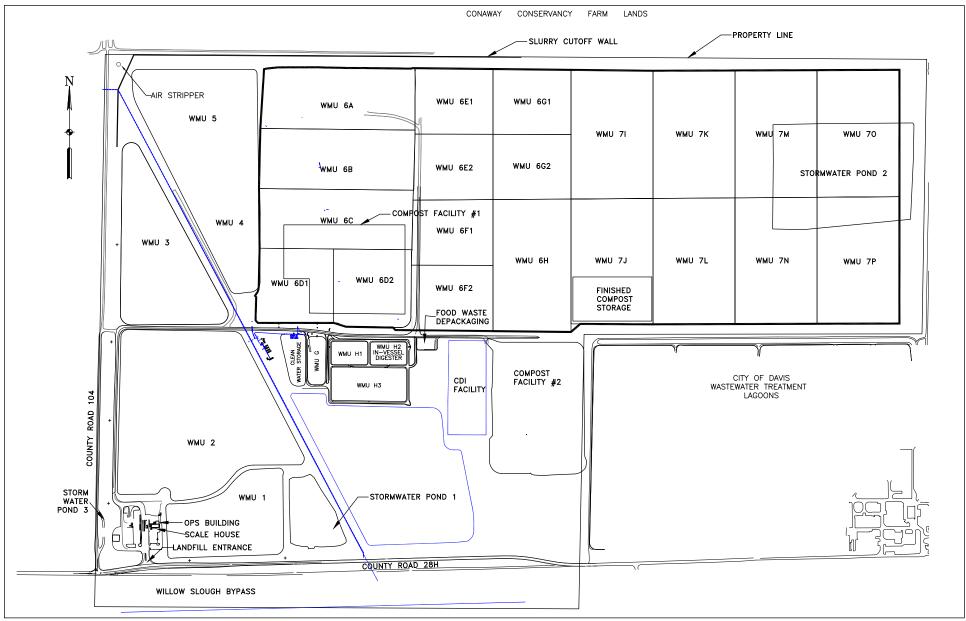
The Project evaluated in this EIR consists of several changes to YCCL's existing operations and permits including but not limited to the Solid Waste Facility Permit (SWFP), Yolo-Solano Air Quality Management District (YSAQMD) Permits, and Waste Discharge Requirements (WDRs). These changes would be undertaken to allow the County greater flexibility in developing and implementing processes and operations that would reduce waste from the landfill, reduce environmental impacts of landfill operations, decrease greenhouse gas (GHG) emissions, increase the recovery of materials and energy from waste, operate more efficiently and economically, and extend the facility's lifespan.



Source: Yolo County Community Services Department, 2020

Figure 2-1 Project Location Map





Source: Yolo County Community Services Department, 2021

Figure 2-2 Existing Site Plan



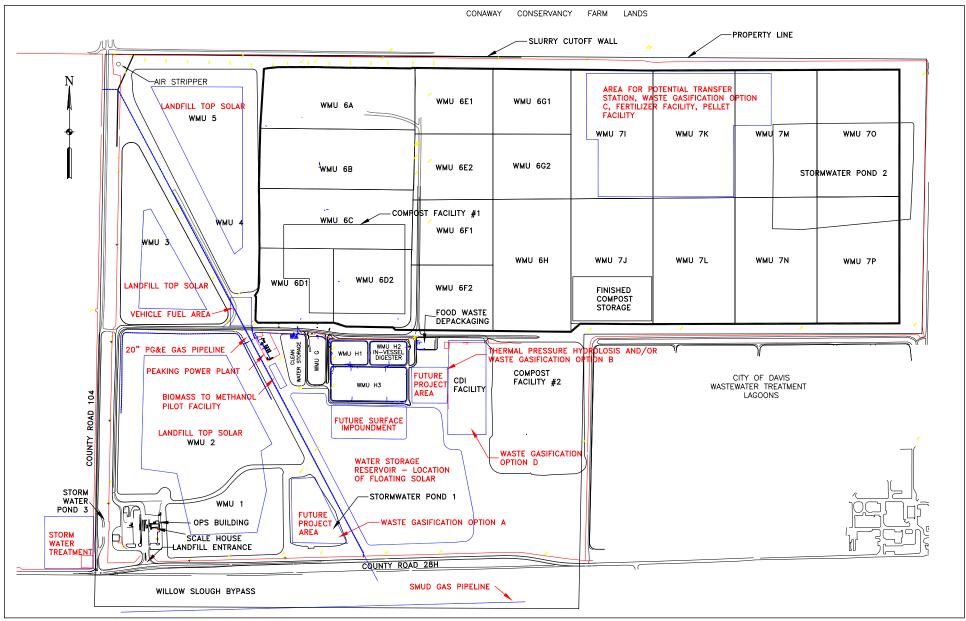
While some of the Project elements, such as construction and operation of a waste gasification facility, are entirely new, many of the Project elements are revisions or improvements to existing designs and operations. The following proposed changes to the design and operation of the YCCL constitute the Project proposed for evaluation in this EIR. The proposed increased daily permitted tonnage is reflective of additional waste streams that can benefit from new processing elements, effects of population increases and/or accommodations for peak days/months that have higher tonnage of certain waste streams that can be processed at YCCL (not increased landfill disposal). Some of the Project elements would potentially process out-of-County waste streams more efficiently than other options. Proposed changes to the design and operation of the YCCL that constitute the Project, and which are analyzed in this EIR, include the following:

- 1. Increased Daily Permitted Tonnage
- 2. Wood Pellet Facility
- 3. Large Scale Floating Solar Photovoltaic System
- 4. Solar Photovoltaic System on Closed Landfill Units
- 5. Waste Gasification Facility
- 6. Expanded Biogas Utilization Options
- 7. Peaking Power Plant
- 8. New Class 2 Surface Impoundment
- 9. Organic Waste Fertilizer Facility
- 10. Storm water Treatment System and Discharge
- 11. Additional Groundwater Pumping (Possible Treatment and Discharge)
- 12. Transfer Station
- 13. Non-Specific Future Off-Site Borrow Area
- 14. Thermal Pressure Hydrolysis System
- 15. Biogas to Methanol Pilot Facility

Each Project element is described in greater detail below. A proposed site layout is shown in **Figure 2-3**.

2.2.1 INCREASED DAILY PERMITTED TONNAGE

The County is proposing to expand the overall permitted tonnage for the YCCL to a monthly average of 2,500 tons per day (TPD) with a daily peak of 3,000 TPD. Currently, the YCCL Solid Waste Facility Permit limits YCCL incoming waste tonnage (disposed and recycled) to a maximum of 1,800 TPD. The 1,800 TPD includes various waste streams, including waste for landfill disposal, organics (yard waste, food waste), wood waste, CDI, liquid waste, and recyclables. The current average daily waste disposed in the landfill at the YCCL is about 500 tons. The County intends to increase the overall tonnage of waste processed at YCCL (recycling, composting, gasification, etc.) and expand construction of various waste conversion technologies in order to extend landfill life and reduce landfill disposal of wastes, reducing landfill gas methane GHG emissions. The current TPD limit also does not distinguish between a monthly average and "peak" daily.



Source: Yolo County Community Services Department, 2021

Figure 2-3 Proposed Site Plan



YCCL currently has days when waste tonnage would exceed 1,800 tons if not for the daily limit. Such peak days are typically the result of heavy vehicles delivering liquid wastes to the Class II surface impoundments or seasonal peaks for yard waste collection (i.e., leaf fall season). YCCL is currently limited to a maximum of 1,047 waste hauling vehicles per day. To accommodate the increased daily permitted tonnage and other Project elements that require truck trips to export products generated from waste, YCCL proposes to limit waste hauling vehicles to 1,305 per day.

2.2.2 WOOD PELLET FACILITY

The County is proposing to develop a wood pellet facility that would utilize biomass fuel (e.g., wood, woody fraction of green waste, compost overs) to create pellets as an energy source that could be sold. The facility would be sited within an approximately five-acre portion in the approximately 41-acre north central area at the YCCL identified for future facility development (see **Figure 2-3**). Much of the facility's operations would be in a building and/or under a covered awning and would also include outdoor storage. The facility would generate up to 50,000 tons of pellets per year, which would require approximately 100,000 tons of incoming biomass feedstock per year. The facility would include conveyors, debarkers, shredders/chippers, dryers/ovens, mixer/agitators, pelletizers, screeners/sifters, coolers, baghouses/cyclones, storage silos, and other necessary material handling and storage equipment. Wood pellet facilities currently operate in California in Stockton, Rocklin, and Mendocino County (Capella).

2.2.3 LARGE SCALE FLOATING SOLAR PHOTOVOLTAIC SYSTEM

The County is proposing the installation of a Floating Solar Photovoltaic (PV) System to address energy usage and demand on-site as well as selling electrical power off-site. The proposed system design would include a floating PV array that would tie into seven PG&E meters for on-site use and off-site sale through County-owned power poles along County Road 29 and pole-mounted transformers at the intersection of County Road 28H and County Road 102. The floating PV panels would cover a large portion of the existing Water Storage Reservoir (see **Figure 2-3**) and would be part of a public-private partnership by the County to generate renewable energy locally, such as sale to the local Community Choice Aggregator (CCA), Valley Clean Energy (VCE). The floating PV panels would provide approximately 1 megawatt (MW) per 3 acres of water storage reservoir area.

2.2.4 SOLAR PHOTOVOLTAIC SYSTEM ON CLOSED LANDFILL UNITS

The County is proposing the installation of a Solar PV System on closed landfill units to address current and future energy usage and demand on-site. The proposed system design would include ground mounted PV panels on closed landfill modules 1-5 (see **Figure 2-3**). The proposed system would include drainage systems and erosion controls to control runoff from the panels. The ground mounted PV panels would provide approximately 1 MW per 2-3 acres of closed landfill unit area and would be part of a public-private partnership by the County to generate renewable energy locally, such as sale to the local CCA, VCE.

2.2.5 WASTE GASIFICATION FACILITY

The County is proposing to develop a waste gasification facility to produce either hydrogen that would be sold and exported, or electricity that would be used onsite and sold when more electricity is produced than needed. Initially, the facility would utilize YCCL's CDI waste wood and compost overs as a feedstock, but could move towards MSW in the future if other Project elements prove to be more efficient or cost-effective in treating CDI waste wood and compost overs. The facility would be sized to process 200 TPD of feedstock, which would produce approximately 11 TPD of hydrogen that would be compressed, stored and regularly collected, requiring up to approximately 15 tractor-trailer trips per day to export the hydrogen to local filling stations. The facility would also produce approximately 6 TPD of inert slag/aggregate coproduct that could be used on-site for all weather road construction or would be exported from the site requiring approximately 3 tractor-trailer trucks per week. Alternatively, if the facility is designed to generate electricity, the 200 TPD could produce approximately 5 MW of power. This would be achieved through a fully enclosed gasification/combustion process to create steam to run a turbine generator. The facility would be integrated with the electrical grid, which would allow the YCCL to sell excess power when more electricity is produced than needed.

The facility would require an approximately four-acre footprint and would consist of an approximate 20,000 SF feedstock preprocessing building, an approximate 1,500 SF plant control room and an approximate 20,000 SF main office, breakroom, laboratory, and workshop. The facility could be sited at four possible locations at YCCL (see **Figure 2-3**).

Construction of the facility would require approximately two to three years. Construction would consist of approximately nine months of onsite activities by YCCL and their contractors to bring utilities (e.g., all weather roadways, water supply, wastewater discharge, electricity, etc.) to the boundary of the facility footprint. Facility construction would follow and would require site preparation (e.g., excavation, grading, etc.), foundations and building erection, roads, fences, equipment installation, piping interconnection, and electrical installation.

Once operational, the facility would be open 24 hours per day, 365 days per year. The main process (gasification to hydrogen or gasification to electricity) would be operational for approximately 90% of the year. The facility could employ approximately 30 full time employees, with approximately 15 employees at the facility any given day (10 during daytime hours and five during nighttime/early morning hours). Operation of the facility would require onsite equipment such as front-end loaders or tractors, forklifts, boom lifts, and trucks.

2.2.6 EXPANDED BIOGAS UTILIZATION OPTIONS

DIWM is proposing expanded biogas uses. Currently, landfill gas (LFG) is entirely dedicated to the landfill gas to energy facility (LFG-to-energy facility), with the electricity going to SMUD. Additional biogas sources (not dedicated to producing electricity for SMUD) could include the biogas produced from City of Davis WWTP digester that is just east of the landfill, the anaerobic compost facility (Compost Facility #1), and the existing In-Vessel Digester (IV Digester). The IV Digester is a covered pond that digests slurry food wastes to generate biogas.

Options for utilizing non-landfill biogas sources include producing Renewable Compressed Natural Gas (RCNG) vehicle fuel (at a location just north of the LFG-to-energy facility – See **Figure 2-3**) or injection of RCNG gas into a pipeline (PG&E or SMUD high pressure gas line). A PG&E gas line is located directly next to the LFG to Energy Facility and a SMUD gas line runs past YCCL along County Road 29 just south of the landfill main entrance. Biogas would be cleaned and conditioned to meet the applicable standards for vehicle fuel and pipeline RCNG. Removal of biogas contaminants such as volatile organic compounds (VOC's), hydrogen sulfide (H₂S) and other contaminants would be required.

2.2.7 PEAKING POWER PLANT

The County is proposing a peaking power plant that would replace the existing LFG-to-energy facility (see **Figure 2-3**). As addressed above, LFG is dedicated to the LFG-to-energy facility, with the electricity going to SMUD. The peaking power plant would treat and compress LFG, which would then be stored during off-peak hours in underground storage tanks underneath the Plant. Stored LFG would be dispatched daily during peak hours to six 4.4 MW internal combustion (IC) engines for electricity generation for sale, such as to the local CCA, VCE.

The peaking power plant would consist of an approximately 10,000 SF building with the six 4.4 MW IC engines, a compressor, and 6,000 feet of underground storage piping where the LFG is treated (i.e., cleaned, moisture removed, compressed, pressurized, and stored). Construction of the plant would require grading and excavation for the underground storage piping and tanks. Plant construction would follow and would require building construction, equipment installation, piping interconnection and electrical installation.

2.2.8 NEW CLASS 2 SURFACE IMPOUNDMENTS

The County is proposing to develop a new Class 2 liquid surface impoundment to store and treat leachate and liquid waste received at the YCCL. The pond would be a Class 2 double lined liquid surface impoundment. The surface impoundment would be approximately 10 acres and located directly south of the existing WMU H3 surface impoundment (see **Figure 2-3**). This impoundment would include treatment of the liquids (i.e., more aeration) that could then be sent to Davis WWTP.

2.2.9 ORGANIC WASTE FERTILIZER FACILITY

The County is proposing to develop an organic fertilizer facility that utilizes organic waste (compost, compost feedstock, liquid waste, and animal manures) and converts it into fertilizer. The facility would be sited in an approximately five-acre portion of the approximately 41-acre north central area at the YCCL identified for future facility development (see **Figure 2-3**). The facility would be sized to handle up to 50,000 tons to 100,000 tons of organic waste per year. The facility would consist of an approximately 30,000 SF enclosed warehouse with outdoor storage and loading areas. Digestate would be removed from the Compost Facility #1 (anaerobic composter) and transported to the fertilizer facility to be processed. Digestate would be heated to dry, sorted by size, and mixed with other products to produce a specific organic fertilizer for sale.

2.2.10 STORM WATER TREATMENT SYSTEM AND DISCHARGE

The County is proposing to develop a storm water treatment system to treat collected storm water that would meet EPA benchmarks for discharge into Willow Slough bypass. The system would be sized in conjunction with storage capacity to manage the 100-year, 24-hour storm, as required by the facility's Waste Discharge Requirements (WDRs). The proposed discharge point would be at an existing pump station located on YCCL's existing soil borrow site west of County Road 104 (see **Figure 2-3**). The proposed storm water treatment would be upstream of the discharge point and could consist of passive floc logs that are used to clarify storm water removing turbidity such as sediment, heavy metals, and inanimate nutrients reducing the total suspended solids.

2.2.11 ADDITIONAL GROUNDWATER PUMPING (POSSIBLE TREATMENT AND DISCHARGE)

The County is proposing to increase groundwater pumping at the YCCL. The YCCL area has naturally high groundwater. The landfill also has an existing groundwater extraction and treatment system to lower groundwater under several modules and treat volatile organic compounds (VOC's) detected in several wells. Currently this water is retained on-site due to naturally occurring boron and selenium. Recent groundwater readings indicate that this system is not completely effective at lowering groundwater under several of the closed landfill units and the Central Valley Regional Water Quality Control Board (CVRWQCB) has directed the County to address the issue. DIWM proposes to increase the groundwater pumping to address this and there may not be space to retain this water on-site.

Currently, plant production (growing fescue for phytoremediation on 45 acres each year) is used to treat groundwater because of the high levels of naturally occurring boron and selenium. The additional groundwater pumping would be phased, with 10 extraction wells under Phase 1 and 39 extraction wells under full build-out conditions. Additional treatment options may be necessary to allow this water to be discharged off-site. Various treatment options will be reviewed in the EIR as well as the relevant agency performance-based standards.

2.2.12 TRANSFER STATION

The County is proposing to develop a transfer station to transfer solid waste to an off-site landfill in approximately ten years. The transfer station would be sited within an approximately 15-acre portion of the 41-acre north central area at the YCCL identified for future facility development (see **Figure 2-3**). The transfer station would be sized to handle the landfill's current and future waste flow and the reductions of landfill disposal as required by the regulatory agencies. The transfer station is estimated to have a design capacity of 500 TPD, which would require an approximately 40,000 SF transfer building (U.S. EPA, 2002). Transfer stations are typically quite tall to accommodate several levels of traffic and transfer trailer loading, therefore the proposed transfer station building would be approximately 50 feet tall. The transfer station is being analyzed due to the increased soil needs and cost to develop new landfill modules as well as the associated air pollution and GHG emissions.

Incoming materials now generally go to the organics recycling area or directly to landfill disposal. Materials going directly to landfill disposal are wastes that are low in organics content and low in recoverable recyclable materials. These loads would be directed to the transfer station, where they would be consolidated for transport into a transfer trailer and exported to an off-site landfill in the region.

2.2.13 NON-SPECIFIC FUTURE OFF-SITE BORROW AREA

The County may need to purchase a new off-site borrow area for its soil needs. YCCL has a shortage of soil for daily, intermediate, and final cover material, and DIWM imports soil from off-site sources for these purposes. Soil will also be needed to develop future landfill modules. The County may need to purchase additional property for development of an off-site borrow area that would supply soil to the facility. In 2014 the DIWM purchased a 320-acre parcel directly to the west of the landfill as a soil borrow source [EIR SCH # 2014102015] (Yolo County, 2015). No additional parcel of land has yet been identified for this purpose, but DIWM estimates that up to an additional 640-acre parcel would be needed. Ideally, the parcel would adjoin or be near the existing landfill property. Candidate properties would be surveyed for any important biological, archaeological, or historical resources, and appropriate mitigation measures would be developed and employed prior to commencement of borrow operations. This aspect of the Project may require additional or future environmental, land use, and zoning considerations to allow soil borrow operations, including a mining permit.

2.2.14 THERMAL PRESSURE HYDROLYSIS SYSTEM

The County is proposing a Thermal Pressure Hydrolysis (TPH) system. TPH is a two-stage process combining high-pressure steaming of waste (organic and sludge) followed by a rapid decompression. This combined action sterilizes the waste and makes it more biodegradable, which improves digestion performance. Sterilization also destroys pathogens. This increases biogas production from anaerobic digestion (AD) of such waste. In a semi-continuous process, mechanized movements along with the pressure and temperature break down the most complex molecules to sanitize and homogenize the entire organic fraction of the waste. The product from this pre-treatment process is a bio-thermal-stabilized biomass with <70% moisture content and organic matter content >90%. TPH pretreatment can help to overcome the challenges of viability of AD as it has shown promising increase in efficacy of AD (~20% increase in biogas).

The TPH system would be sized to process 160 TPD of feedstock and would operate 24 hours per day, 330 days per year. The TPH system would be approximately 50 feet tall and would consist of four levels of autoclaves on outdoor stands with staircases for worker access. Feedstock material would be placed into the feeding hopper up in the first autoclave, and the processed material would be discharged down in the fourth autoclave. Belt conveyors feed the system and transport processed material from the fourth autoclave. Mobile equipment (likely a bulldozer and crane) would be required for feeding the belt conveyor and transporting processed material to AD facilities. The TPH system would be located right before or after existing pre-sorting equipment for AD facilities and would require an approximately 3,000 SF footprint (see Figure 2-3). The TPH system would require water, electricity, a cooling tower, and a boiler to produce steam.

Construction of the TPH system would require onsite activities by YCCL and their contractors to bring utilities (e.g., water, electricity, and natural gas) to the boundary of the TPD system footprint. TPH system construction would follow and would require site preparation (e.g., excavation, grading, etc.), foundations and erection of the prefabricated TPH system, equipment installation, piping interconnection and electrical installation.

2.2.15 BIOGAS TO METHANOL PILOT FACILITY

The County is proposing a Biogas to Methanol Pilot Facility. The facility would be a GasTechno® Process facility or similar technology. Traditionally, natural gas is reformed into syngas, and then further converted into methanol and other liquid chemicals or fuels. The process is complex and requires high-maintenance catalysts and massive economies of scale to be profitable. Most natural gas sources are simply too small to apply syngas technologies. For these applications the GasTechno process is the only option.

The GasTechno process eliminates the syngas step and associated catalyst by converting methane directly into methanol via a patented direct homogenous partial oxidation process. The GasTechno system features an energy-neutral recycle loop where unreacted methane is scrubbed and recycled until the desired conversion is achieved. The carbon and thermal efficiencies of the resulting process are comparable to syngas-based technologies.

The facility would utilize LFG and digester gas from YCCL that is currently being flared, as well as City of Davis WWTP digester gas (adjacent to YCCL), as feedstock. The facility is estimated to require approximately 350 standard cubic feet per minute (SCFM) of gas input, which would produce approximately 1,500 gallons per day (GPD) of methanol, 300 GPD of ethanol, and 1,200 GPD of wastewater. The wastewater from the process would be sent to on-site surface impoundments then eventually sent to City of Davis WWTP. The methanol and ethanol would be stored on-site and periodically collected, requiring approximately two truck trips per day.

The GasTechno process is a closed loop system with purge gas being sent back to a flare or power generation. The facility would result in a significant reduction in flaring emissions at YCCL and would produce renewable methanol that can be converted into electricity and/or low carbon transportation fuels.

The facility would be located just south of the existing LFG to energy facility (west of the existing clean water storage pond) and would require an approximately 16,000 SF footprint (see **Figure 2-3**). Construction of the facility would require onsite activities by YCCL and their contractors to bring utilities (e.g., water and electricity) to the boundary of the facility footprint. A pipeline from the City of Davis WWTP to the facility would also be constructed if WWTP digester gas is utilized as feedstock. Facility construction would follow and would require minor site preparation (e.g., excavation, grading, etc.), equipment installation, piping interconnection, and electrical installation.

2.3 PROJECT TIMING

Construction activities would occur intermittently over the next twenty years as funding becomes available and equipment/technology manufacturers are selected. It is expected that some of the Project elements would be constructed as soon as 2023.

For the purposes of estimating air quality emissions, since the exact timing of the construction of individual Project elements is unknown, construction emissions were estimated under the assumption that construction of the proposed waste gasification facility, thermal pressure hydrolysis system, new class 2 surface impoundment and biogas to methanol pilot facility would occur simultaneously in 2023 and 2024. Construction of other Project elements that would require major construction activities would likely occur in a subsequent year exclusive of construction activities for other Project elements and would be less intense than the simultaneous construction of these four Project elements.

2.4 PROJECT OBJECTIVES

- 1. To decrease adverse environmental impacts of landfill development, operations, and final closure, and increase the environmental benefits that can be derived from certain aspects of existing YCCL operations.
- 2. To increase the County's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in AB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (AB 32).
- 3. To increase efficiency, diversify operations, and operate more economically.
- 4. To extend the overall site life of the existing YCCL through new operational methodologies.

2.5 REGULATORY REQUIREMENTS, PERMITS AND APPROVALS

Yolo County would be required to approve the Project prior to developing any of the Project elements. Yolo County would use information contained in this EIR during the decision-making process. The Yolo County Environmental Health Division is the solid waste Local Enforcement Agency (LEA). The LEA and CalRecycle would also use the EIR during the decision-making process to approve the SWFP Revision. Permits and approvals from other agencies would be necessary prior to the development of the Project. Known entitlements, permits, and approvals required for the Project are identified below.

Yolo County:

- Certification of Final EIR;
- Adoption of a Mitigation Monitoring and Reporting Plan (MMRP), Findings, and Statement of Overriding Considerations (if necessary);
- Approval of the Site Plan; Other County permits such as Building and Grading Permits related to individual Project elements; possibly an agricultural surface mining permit related to the non-specific future off-site borrow area.

Other Governmental Agency Approvals:

- CalRecycle must concur with the LEA's decision to approve the SWFP Revision.
- The Yolo-Solano Air Quality Management District (YSAQMD) requires an Authority to Construct/ Permit to Operate (ATC/PTO) for equipment that emits air pollution related to the operation of the project. Project elements may require revisions to current air quality permits outlined in **Table 2-1**.
- The Central Valley Regional Water Quality Control Board (RWQCB) requires Waste Discharge Requirements (WDRs) for operations that discharge waste to land. The proposed Class 2 Surface impoundment would require WDRs. A new National Pollutant Discharge Elimination System (NPDES) State Construction General Permit would be required for construction activities not covered under the Stormwater Pollution Prevention Plan (SWPPP) for operations associated with the existing Industrial General Permit.

The YCCL's current permits relevant to the Project elements analyzed in this EIR are outlined below in **Table 2-1**.

2.6 REFERENCES

- Applied Polymer Systems. *APS 700 Series Floc Logs*. <u>https://www.siltstop.com/pictures/floclogdatasheet.pdf</u>. Accessed February 4, 2021.
- Yolo County. 2020. Notice of Preparation Environmental Impact Report (EIR) & Notice of Public Scoping Meeting. August 28, 2020.
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- Yolo County. 2015. Draft Environmental Impact Report Yolo County Central Landfill Soil Borrow Site Project. January 2015.
- Yolo County. 2005. Yolo County Central Landfill Permit Revisions Final Subsequent Environmental Impact Report SCH No. 1991073040. May 2005.
- Yolo County. 1992. Final Environmental Impact Report Yolo County Central Landfill State Clearinghouse No. 91123015. October 1992.
- United States Environmental Protection Agency (U.S. EPA). 2002. Waste Transfer Stations: A Manual for Decision-Making. June 2002.

TABLE 2-1. CURRENT YCCL PERMITS RELEVANT TO PROJECT

| Permit Type | Permitting Agency | Permit Authority | Permit Date | Revision | | | |
|---|---|---|---|--|--|--|--|
| WATER QUALITY | | | | | | | |
| Waste Discharge Requirements, Order No. R5-2016-0094 (for the Class III Landfills and Class II Surface Impoundments) | California Regional Water Quality Control Board, Central Valley Region | State Water Resources Control Board Resolution No. 93-62 implementing Parts 257 and 258 of Title 40 CFR (Subtitle D) | 14 December 2016 | Would require revisions to address development of future Project elements, such as the New Class 2 Surface impoundment. | | | |
| Waste Discharge Requirements, Order No. R5-2002-0078 (for the Groundwater Extraction and Treatment System, Storage Reservoir, and Land Application Area) | California Regional Water Quality Control Board, Central Valley Region | State Water Resources Control Board Resolution No. 93-62 implementing Parts 257 and 258 of Title 40 CFR (Subtitle D) | 26 April 2002 | May require revision if the proposed additional ground water pumping is found to be not in accordance with current permit conditions. | | | |
| AIR QUALITY | | | | | | | |
| Permit To Operate for Neo Yolo LLC | Yolo Solano Air Quality Management District | Permit To Operate enclosed flare and landfill gas collection system according to YSAQMD Rules and Regulations | 1 March 2017 | No revision required or requested. | | | |
| Permit To Operate for MM Yolo Power LLC, for five (5) energy recovery generators operated in conjunction with energy recovery facility. | Yolo Solano Air Quality Management District | Regulation II, Rule 2.34 – Stationary Gas Turbines | 1 March 2017 | No revision required or requested. Project could potentially replace these engines with a peaking power plant. | | | |
| Permit to Operate Yolo County | Yolo Solano Air Quality Management District | Permit To Operate two internal combustion engines, back-up generators, landfill fugitive emissions, septage receiving system/in-vessel digester, and use of biosolids as landfill cover. Also permits for anaerobic composters, grinding, crushing, and screening activities. | Various Dates | May require revisions to address development of future Project elements. | | | |
| Title V Permit (F-01392-8) | Yolo Solano Air Quality Management District | Title V Permit (encompasses all local air permits) | 13 March 2018 | Would require revisions to address development of future Project elements. | | | |
| LAND USE AND PLANNNG | | | | | | | |
| County Integrated Waste Management Plan Consistency, Siting Element and Non-Disposal Facility Element | Yolo County Planning and Public Works Department, Division of Integrated Waste Management | Public Resources Code § 41700 et seq | 23 October 2012 Update was approved (to address the closure of the UC Davis Landfill) | Next periodic revision of Countywide Siting Element would need to be revised to reflect future Project elements, such as the Transfer Station. | | | |

TABLE 2-1. CURRENT YCCL PERMITS RELEVANT TO PROJECT (Continued)

| Permit Type | Permitting Agency | Permit Authority | Permit Date | Revision | | | |
|---|---|--|--------------------------------------|---|--|--|--|
| PUBLIC AND ENVIRONMENTAL HEALTH | | | | | | | |
| Solid Waste Facility Permit 57-AA-0001 | Local Enforcement Agency with concurrence from the CalRecycle | Chapter 3 of Title 14 CCR—Minimum Standards for the Handling and Disposal of Solid Waste | Facility Permit issued July 31, 2018 | Revised permit required to incorporate proposed physical and operational change, such as the proposed increases in waste acceptance and vehicles. | | | |

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