SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC)

Joint Genome Institute
Production Sequencing Facility
Walnut Creek, California

Prepared by

Robert Fox
Lawrence Berkeley National Laboratory

REVISION 3.0
February 28, 2014

SPCC PLAN APPROVAL

REVISION 3.0 **AMENDMENT 0**

DESCRIPTION OF SPCC PLAN AMENDMENT

- Updated section 1.4, Designated Responsible Persons, by adding Jim Floyd, Director of EH&S.
- Updated section 3.2, Prediction of Spills, to identify a closer storm drain found at 15 feet from the aboveground storage tank.
- Updated section 3.3, Containment and Continuous Monitoring, by correcting secondary piping from schedule 80 PVC to fiberglass.
- Updated section 3.4, Contingency Plan, to add LBNL's Blackberry Gate contact.
- Deleted section 5.0, Facility Tank Truck Loading/Unloading since 40 CFR 112.7(h) applies only oil terminal rack loading/unloading and is not applicable to the JGI.
- Updated section 6.2, Inspections, to include an annual AST inspection.
- Updated section 9.1, Documents, to add new reference documents and delete obsolete reference documents.
- Updated section 9.2, SPCC Plan Compliance Reference Table.

MANAGEMENT APPROVAL OF SPCC PLAN REVISION/AMENDMENT

3/10/14

Ray Turner, Division Deputy of Operations — Date
DOE Joint Genome Institute – Production Sequencing Facility

3/11/14

Greg Stanley, Facility Manager — Date
DOE Joint Genome Institute – Production Sequencing Facility

3/10/14

Steve Franaszek, Safety Coordinator — Date
DOE Joint Genome Institute – Production Sequencing Facility

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I have visited and examined the facility, and being familiar with the provisions of 40 CFR 112, attest that this SPCC Plan has been prepared or modified in accordance with good engineering practices, including consideration of applicable industry standards and the requirements for 40 CFR 112, and that procedures for required inspections and testing have been established; and that the Plan is adequate for the facility.

REGISTERED PROFESSIONAL ENGINEER
TIM W.J. BAUTERS
No. 74188
Exp. 6 30 2015
CIVIL
STATE OF CALIFORNIA

Signed & Stamped by Tim W.J. BAUTERS on:

February 28, 2014

Tim Bauters, PhD., PE
California Registered Civil Engineer #C74188

Date

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1.0 Introduction

1.1 Purpose

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to provide standards for the storage and usage of oil at the Joint Genome Institute – Production Sequencing Facility (JGI) that will prevent the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. This SPCC Plan (Plan) has been prepared in accordance with the requirements set forth in Title 40, Part 112 of the Code of Federal Regulations (40 CFR 112); the California Health and Safety Code Chapter 6.67 (H&SC 6.67); and the United States Department of Energy (DOE) Order No. 5400.1. In order to prepare this Plan, the Lawrence Berkeley National Laboratory (Berkeley Laboratory) has analyzed the JGI facility's capability to prevent oil discharges and facilitate safety awareness. By accumulating the information necessary for the Plan, the Berkeley Laboratory promotes the use of appropriate design and operational standards that reduce the likelihood of an oil discharge at the JGI facility. Location maps are found in Appendix B.

1.2 Applicability

Facilities are required to prepare SPCC Plans if they store any form of oil or petroleum product in excess of the minimum quantities defined below, and are located such that the facility could reasonably be expected to discharge harmful quantities of oil into navigable waters. Non- transportation facilities are required to prepare SPCC Plans if they meet the following criteria:

- An aggregate aboveground storage capacity of more than 1,320 gallons, or
- A total underground storage capacity of 42,000 gallons; and
- Could reasonably be expected to discharge oil in harmful quantities into navigable waters of the United States.

The Joint Genome Institute currently has:

- An aboveground diesel storage tank that has a storage capacity of 4000 gallons.
- A storm drain, located 50 yards from the aboveground storage tank, discharges through the storm drain system into a creek named, "Walnut Creek". Walnut Creek flows into Suisun Bay - both are navigable waters of the United States.

The Joint Genome Institute is therefore subject to the requirement to prepare a SPCC Plan.

For the purposes of this Plan:

- Oil is defined in 40 CFR 112.2(a) as "oil (or petroleum products) of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil."

- Harmful quantities of oil or petroleum products are defined in 40 CFR 110 as those that "(a) violate applicable water quality standards, or (b) cause a film or sheen upon or discoloration of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."

- A bulk oil or petroleum storage unit is defined as a storage tank or drum having a capacity of 55 gallons or greater. This Plan addresses bulk storage of oil or petroleum products only.

1.3 Plan Maintenance and Amendments

The Environment Services Group (ESG) of the Berkeley Laboratory is responsible for maintaining and updating this SPCC Plan. A complete copy of this Plan is maintained at all times at the JGI Facility Maintenance Manager's office, at the ESG office of the Berkeley Laboratory and at the DOE Oakland Operations Office. This Plan is available to representatives of regulatory agencies for on-site review during normal business hours.

The US Environmental Protection Agency may require amendment to the Plan following spills of harmful quantities of oil to navigable waters. The SPCC Plan will be amended within six months following any change in facility design, construction, operation, or maintenance, which significantly affects the potential for discharges of oil into navigable waters. In addition, the Berkeley Laboratory will review and evaluate the SPCC Plan every five years. Within six months following completion of the review, the Berkeley Laboratory, if necessary, will revise the Plan to include any identified improvements in prevention and control technology. A Professional Engineer registered in the State of California will certify all amendments to the SPCC Plan. Changes in emergency contact names and telephone numbers will be made as they occur and will not require engineering certification. This exception allows for maintaining an emergency contact list and does not affect the technical/engineering aspects of this Plan.

1.4 Designated Responsible Persons

The following individuals are those designated responsible for oil spill prevention at Joint Genome Institute:

Greg Stanley
JGI Facility Maintenance Manager

Ron Pauer
Group Leader, Environmental Services Group, Lawrence Berkeley National Laboratory

James Floyd
Director, Environment, Health and Safety Division, Lawrence Berkeley National Laboratory

2.0 General Facility Information

Facility Name and Address:		Joint Genome Institute 2800 Mitchell Drive Walnut Creek, CA 94598
Type of Facility:		Research Laboratory [SIC 8733]
Owner Name and Address:		Castle Rock LP. 1855 Olympic Blvd. Suite 250 Walnut Creek, CA 94569
Operator Name and Address:	(1)	University of California Lawrence Berkeley National Laboratory 1 Cyclotron Road Berkeley, California 94720
	(2)	U.S. Department of Energy Oakland Operations Office 1301 Clay Street Oakland, California 94612
Facility Start-up Date:		1998
Location Maps:		Appendix A

3.0 Analysis of Spill Potential

3.1 Spill History

The 4,000 gallon aboveground diesel tank was installed at the Joint Genome Institute in December 1999. Since that time there have been no known oil or petroleum product spills.

Spills at this site are under the jurisdiction of Contra Costa County, a Certified Unified Program Agency (CUPA). The Regional Water Quality Control Boards and State Water Resources Control Board have authority if groundwater or surface water is contaminated.

3.2 Prediction of Potential Spills

The potential for a spill from the 4,000 gallon aboveground storage tank, its mode of failure, the flow direction and the potential quantity of the discharge, and the secondary containment method and containment capacity are shown in Table 1.

Location or Container	Type of Failure	Potential Discharge Volume (gallons)	Direction of Flow for Uncontained Discharge	Secondary Containment Method	Secondary Containment Capacity (gallons)
Bulk Storage Container					
4,000 AST Tank	Overfill	<1 – 3,973	north to Stormdrain	Catch Pan	5
4,000 AST Tank	Fitting leak	<1 – 4,000	north to Stormdrain	Double wall piping	Limited to the interstitial space between the pipes (< 10)
4,000 AST Tank	Seam failure internal tank	<1 – 55	north to Stormdrain	Secondary shell	4,000
4,000 AST Tank	Catastrophic failure, breach of the secondary containment shell	<1 – 4,000	north to Stormdrain	none	none

The closest storm drain is approximately 15 feet north on a down slope from the 4,000 gallon aboveground storage tank towards the Contra Costa Canal. This storm drain flows into the City of Walnut Creek's storm drain system, which empties into a creek named, "Walnut Creek". The flow from Walnut Creek eventually empties into Suisun Bay.

3.3 Containment and Continuous Monitoring

The 4000 gallon aboveground tank is a double walled tank manufactured by ConVault. The primary tank is constructed of steel. The secondary containment consists of a 30 mil thick polyethylene membrane that encloses the primary steel tank and insulation material. The primary steel tank and the secondary containment are encased in six inches of monolithic reinforced concrete. A TraceTek leak detector, manufactured by Raychem, continually monitors the interstitial space of the tank.

Because liquid volumes change with temperature, the tank should not be filled above a level that will result in overflow after thermal expansion (approximately 1 percent volume change per 15 to 25 degrees Fahrenheit temperature change).

The supply and return piping for the aboveground tank system is of double wall construction. The primary piping is constructed of schedule 40 carbon steel and the secondary piping is constructed of fiberglass. The TraceTek leak detector also continuously monitors the interstitial space of the piping.

The TraceTek leak detector has a local audible alarm. A remote audible alarm is also sounded in Building 100 room 110. The Pneumercator fuel level gauge, located on the AST has a high and low level light and audible alarm.

The head of the fuel fill port is enclosed inside of a catch pan that is designed to capture any diesel fuel that might leak out during fuel truck loading operations. The catch pan has the capacity to hold 27 gallons of fuel. In addition, a spill kit with the capacity to absorb 61 gallons is located within the fenced area at the aboveground storage tank.

3.4 Contingency Plan

Guidance for responding to emergencies may be found in the *Joint Genome Institute Integrated Safety Managemetnt (ISM) Plan*. In all cases, the employee is advised to call **9-911** to reach the Walnut Creek Police Department / Contra Costa Consolidated Fire District.

In the event of a spill of diesel fuel from the aboveground tank, the release must be immediately reported to the Walnut Creek Police Department / Contra Costa

Consolidated Fire District **9-911**, and the Berkeley Laboratory Blackberry Gate **(510) 486-6999**. Blackberry Gate personnel will contact Berkeley Laboratory EH&S.

The following items will be reported: (1) The amount of diesel fuel spilled; (2) Whether the spill was to soil or pavement, and if the spill reached a storm drain; (3) Explain what containment measures were taken (spill kit deployed?); (4) Estimate how much diesel fuel was recovered; (5) Give the time and location of the spill.

4.0 Facility Transfer Operations

4.1 Aboveground Piping

All aboveground piping supports are designed to minimize corrosion and abrasion. Aboveground piping is monitored via continuous leak detection (TraceTek) and visually inspected. All aboveground piping and valves associated with aboveground tank will be inspected as specified in Section 6.2.

The aboveground piping is not exposed to vehicular traffic. Warning signs and barriers will be posted if future pipeline installations result in exposures of pipelines to traffic. No underground piping exists in the tank system.

4.2 Out-of-Service Piping

Aboveground piping that is not in service or is in standby service for an extended time will be capped and blank-flanged when removal is not practical. The JGI has adopted "Lock Out / Tag Out" procedures to increase safety around the facility and reduce the chance of spills.

5.0 Inspections and Records

5.1 Responsibilities

Procedures for the maintenance of the tank and piping systems are developed and implemented by the Facility Maintenance Manager. The Facility Maintenance Manager oversees leak tests, monitoring, and inspections of the aboveground tank and piping. The Facility Maintenance Manager maintains records of the results. The Facility Maintenance Manager ensures that the fire extinguisher and spill kit are fully serviceable.

5.2 Inspections

The leak detection/monitoring system for the aboveground tank and piping is inspected monthly. The aboveground storage tank, foundation, and tank supports are visually inspected by the Facility Maintenance Manager monthly for signs of cracks, corrosion, or other structural deterioration. The inspection also includes a visual review of aboveground valves, pipeline joints, catch pans, piping supports, locks, and metal surfaces. An example of Facility Maintenance Manager's inspection form is located in Appendix B. If visual inspection of aboveground equipment indicates that there may be potential problems, corrective actions will be taken including, if necessary, conducting pressure tests, and ultrasonic nondestructive testing or other appropriate testing methods.

5.3 Records

All records required by this SPCC Plan are maintained for a minimum period of three years on site. After three years, the records may be retained or archived. Tank inspection records are maintained by the Facility Maintenance Manager.

6.0 Security

6.1 Barriers to Entry

Six-foot high chain link fencing surrounds the 4000 gallon aboveground storage tank at the Joint Genome Institute. The gate is kept locked. The fuel port cap is also kept locked. The Facility Manager controls access to the aboveground storage tank and the fuel port. The fencing provides the tank and pipe system protection from vehicular traffic.

6.2 Facility Lighting

There are three floodlights located in the fenced area surrounding the aboveground storage tank. These floodlights provide appropriate lighting for the entire fenced area.

7.0 Personnel Training

7.1 Training Programs

Personnel involved with the 4,000 gallon aboveground storage tank at the Joint Genome Institute receive instructions, on the job training, and/or formal classes to ensure adequate

understanding in the proper operation and maintenance of equipment and spill prevention. Training may include:

- Discussion regarding applicable pollution control laws, rules, and regulations;
- Introduction of new technology or revised procedures; and
- Familiarization with the SPCC Plan, emphasizing the SPCC Plan as a resource for informing current and new employees to enhance response and pollution awareness.

Training associated with the Plan is considered job-related or required training. Whenever such training occurs, the facility manager(s) and/or the directorate's delegated personnel will record attendance of participants.

7.2 Spill Prevention Briefings

The Environmental Protection (EP) Group representative from the Lawrence Berkeley National Laboratory will conduct annual spill prevention briefings, training sessions, meetings or issue reports/memos to assure adequate understanding of this SPCC Plan. These activities will:

- Highlight and describe known spill events or failures;
- Provide a brief overview of applicable regulations, provide an update on changes or updates to the SPCC Plan or regulations;
- Provide a review of SPCC procedures, and recently developed precautionary measures; and
- Provide an opportunity for comments and discussion.

These activities may also be included as part of the personnel training. The target audience will include both EH&S personnel and Facility personnel responsible for implementation of the SPCC Plan or procedures, and other personnel that may be affected by the requirements in this SPCC Plan.

As much as possible, SPCC awareness will be incorporated into other required EH&S training courses. Periodically, the EP Group will schedule/conduct refresher/training classes for SPCC awareness. The official SPCC training course is EH&S # 680.

8.0 References

8.1 Documents

Joint Genome Institute – Production Sequencing Facility Emergency Procedures

- *Joint Genome Institute Integrated Safety Management (ISM) Plan*

Lawrence Berkeley National Laboratory Emergency Procedures

- *Emergency Management, Chapter 9,* Environment, Health & Safety Manual, Publication 3000, latest Revision; Web access: *http://www.lbl.gov/ehs/pub3000/pub3000c.html*

Regulatory

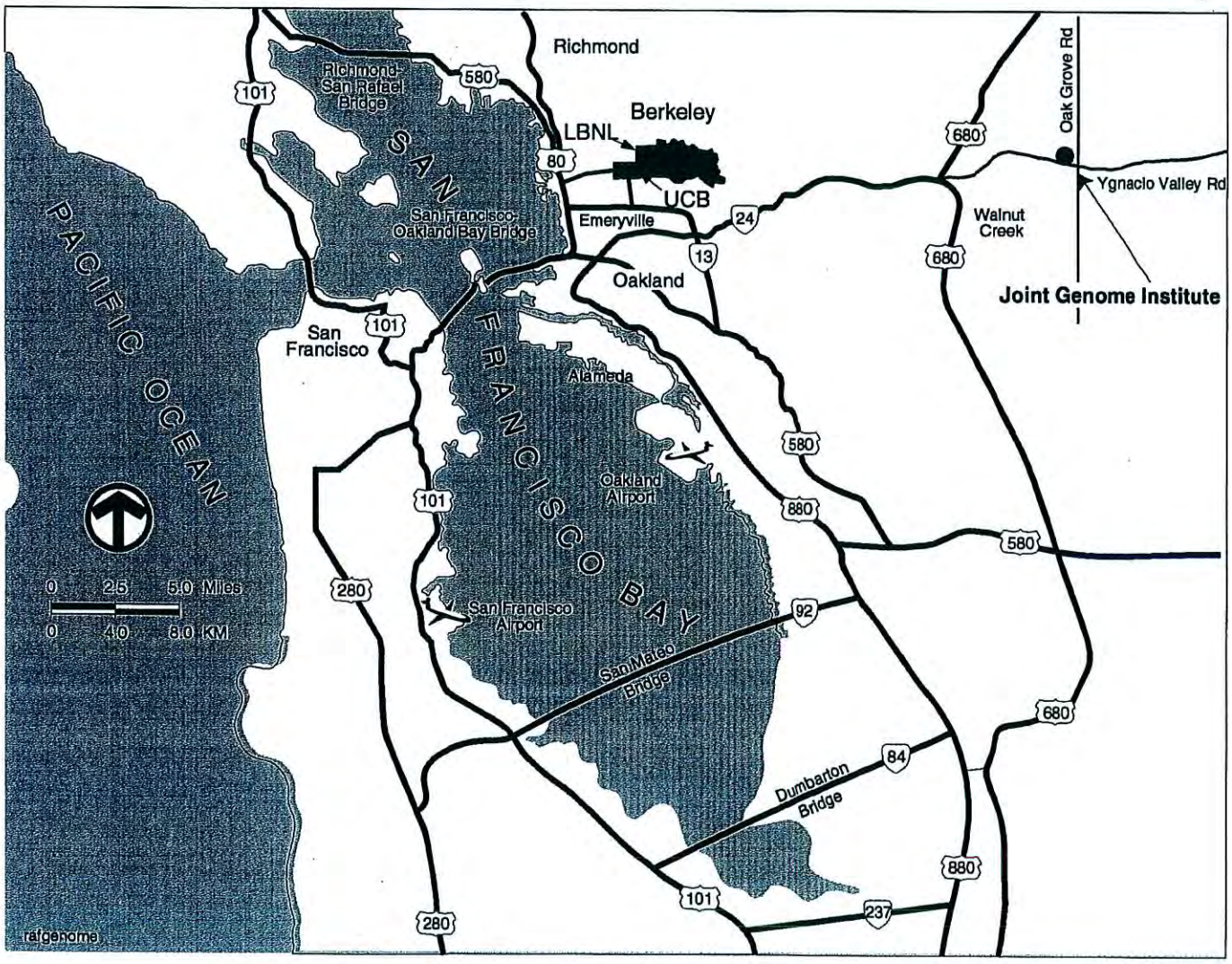
- California *Aboveground Petroleum Storage Act,* Division 20, *section 25270.*
- *Code of Federal Regulations, Part 109 and Part 112*
- *California Health and Safety Code*; *Chapter 6.67 (H&SC 6.67)*

8.2 SPCC Plan Compliance Reference Table

Reg. 40 CFR 112	Requirement	SPCC Plan Section
112.3 (d)	P.E. certification	After Title Page
112.3 (e)	Plan Maintenance	1.3
112.4 (a)	Agency review and amendment	1.3
112.5	Amendments by owner/operator	1.3
112.7	Management approval	After title page
112.7 (a)	Spill history	3.1
112.7 (b)	Prediction of spills	3.2
112.7 (c)	Containment and diversionary structures	3.3
112.7 (d)	Oil spill contingency plan	3.4
112.8 (b)	Facility drainage	3.2
112.8 (c)	Bulk storage	3.3
112.8 (c) (1)	Materials of construction	3.3
112.8 (c) (2)	Secondary containment on storage unit	3.3
112.8 (c) (3)	Rainwater drainage	Not applicable
112.8 (c) (4)	Underground tanks	Not applicable
112.8 (c) (5)	Partially buried tanks	Not applicable
112.8 (c) (6)	Aboveground tank inspections	5.2
112.8 (c) (7)	Internal heating coils	Not applicable
112.8 (c) (8)	Overfill protection	3.3
112.8 (c) (9)	Plant effluents	Not applicable
112.8 (c) (10)	Visible oil leaks	5.2
112.8 (c) (11)	Portable storage tanks	Not applicable
112.8 (d)	Transfer operations	4.0
112.8 (d) (1)	Underground piping	Not applicable
112.8 (d) (2)	Out-of-service piping	4.2
112.8 (d) (3)	Piping supports	4.1
112.8 (d) (4)	Piping inspections	6.2
112.8 (d) (5)	Traffic warnings	7.1
112.7 (h)	Facility tank car loading/unloading	Not applicable
112.9	Onshore oil production	Not applicable
112.10	Onshore oil drilling	Not applicable
112.11	Offshore oil production/drilling	Not applicable
112.8 (c) (6)	Inspection and records	6.0
112.7 (g)	Security	7.0
112.7 (f) (1)	Personnel Training	8.0

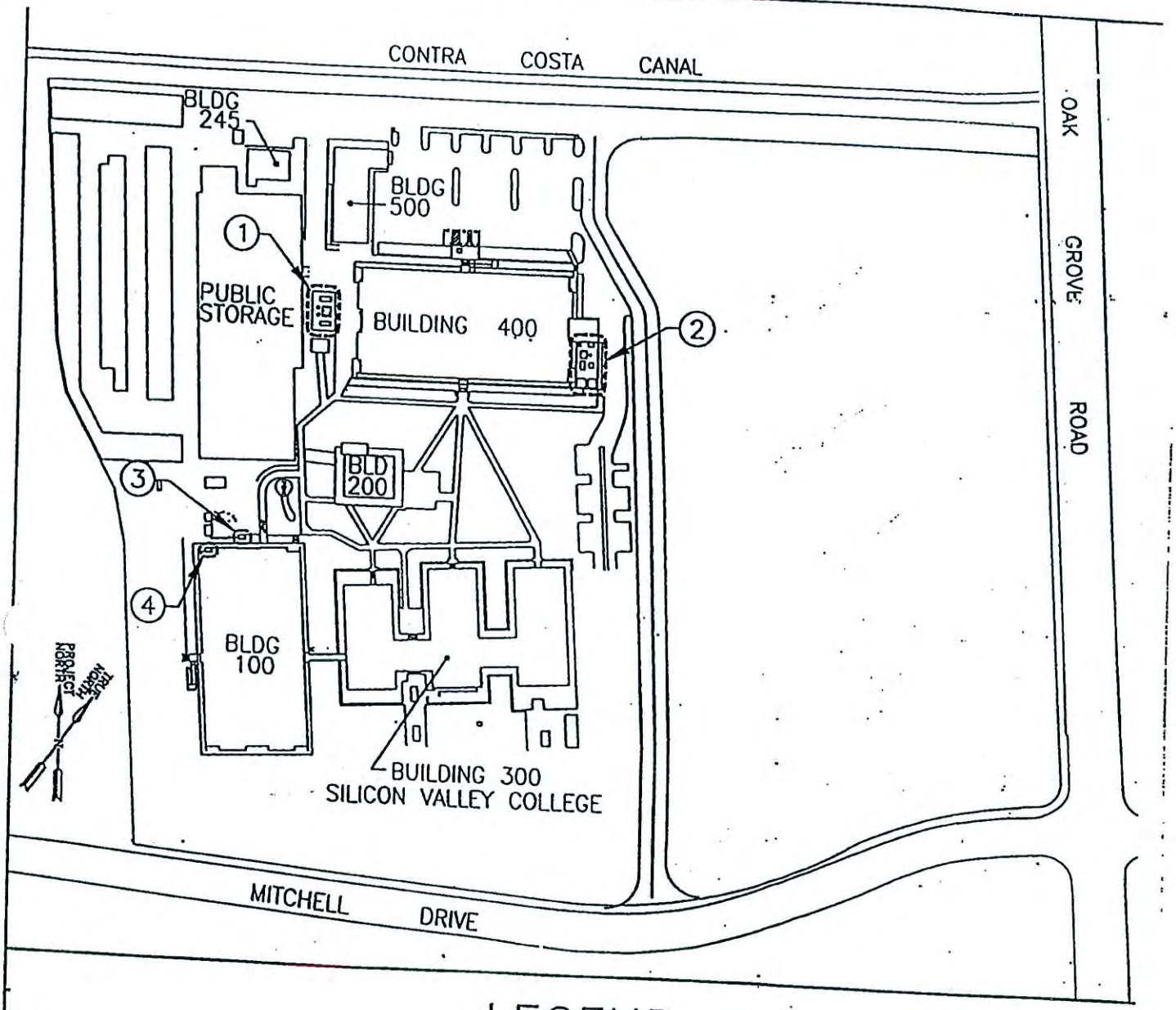
Appendix A

Location Maps



Map 2.0 San Francisco Bay Area

SITE MAP



LEGEND

① 4,000 gallon aboveground storage tank containing diesel fuel

MAP 2.1 2800 Mitchell Drive, Walnut Creek, CA

Appendix B

Tank Inspection Form

ABOVE GROUND DIESEL STORAGE TANK
MONTHLY INSPECTION FORM

Location: JGI-400 **TANK No.:** TK-001- JGI

Tank Manufacturer: ConVault **Serial No:** M851307

Model No.: RN4000 3SF **Date Installed:** Dec-99

COMPONENT	INSPECT FOR	Y	N	REMARKS
Foundation / Structural Support	Corrosion			
	Cracks			
	Distortion			
Tank Walls & Casing	Corrosion			
	Cracks			
	Leaks			
	Openings Sealed			
Pipelines, Plumbing, & Valves	Corrosion			
	Cracks			
	Leaks			
Containment Area	Accumulated Liquids			
	Debris/Fire Hazard			
	Cracks			
	Damage			
	Egress Clear			
	Gate Operable			
	Drain Valve Closed			
Leak Detection System	Damage			
	Power			
	Certification			

Is re-certification of Leak Detections System required? Yes ☐ No ☐ WRC Numbers: _____

If Yes, provide date for recertification: _____

Comments: _____

Signature: _____ Date: _____

Print Name: _____

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Facility Name:	Joint Genome Institute	Inspection Date:	
Address:	2800 Mitchell Drive, Walnut Creek, CA 94598	Prior Inspection Date:	
Inspector Name:		Retain Until Date (36 months from inspection date):	
Tanks Inspected (ID #'s):	TK-001-JGI		

Inspection Guidance:

- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

Item	Task	Status	Comments
1.0 Tank Containment			
1.1 Containment structure	Check for: • Holes or cracks in containment wall or floor • Washout • Liner degradation • Corrosion • Leakage • Paint failure • Tank settling	☐Yes* ☐No ☐N/A	
2.0 Tank Foundation and Supports			
2.1 Foundation	Settlement or foundation washout?	☐Yes* ☐No	
2.2 Concrete pad or ring wall	Cracking or spalling?	☐Yes* ☐No ☐N/A	
2.3 Supports	Check for corrosion, paint failure, etc.	☐Yes* ☐No ☐N/A	
2.4 Water drainage	Water drains away from tank?	☐Yes ☐No* ☐N/A	
2.5 Tank grounding	Strap secured and in good condition?	☐Yes ☐No* ☐N/A	

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Item	Task	Status	Comments
3.0 Cathodic Protection			
3.1 Galvanic cathodic protection system	Confirm system is functional, includes the wire connections for galvanic systems	☐Yes ☐No* ☒N/A	
3.2 Impressed current system	a. Inspect the operational components (power switch, meters, and alarms).	☐Yes ☐No* ☒N/A	
	b. Record hour meter, ammeter and voltmeter readings.	☐Yes ☐No* ☒N/A	
4.0 Tank Shell, Heads, Roof			
4.1 Coating	Check for coating failure	☐Yes* ☐No	Check for cracks in concrete.
4.2 Steel condition	Check for: • Dents • Buckling • Bulging • Corrosion • Cracking	☐Yes* ☐No ☒N/A	Tank shell is encased in concrete and not visible.
4.3 Roof slope	Check for low points and standing water	☐Yes* ☐No ☒N/A	
5.0 Tank Equipment			
5.1 Vents	Verify that components are moving freely and vent passageways are not obstructed for: • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent components	☐Yes* ☐No	
5.2 Valves	Check the condition of all valves for leaks, corrosion and damage.	☐Yes* ☐No	- Ball valve on fill port. - Ball valves in transfer/leak detection box.
5.2.1 Anti-siphon, check and gate valves	Cycle the valve open and closed and check for proper operation.	☐Yes ☐No* ☒N/A	
5.2.2 Pressure regulator valve	Check for proper operation. (Note that there may be small, 1/4 inch drain plugs in the bottom of the valve that are not visible by looking from above only)	☐Yes ☐No* ☒N/A	
5.2.3 Expansion relief valve	Check that the valve is in the proper orientation. (Note that fuel must be discharged back to the tank via a separate pipe or tubing.)	☐Yes ☐No* ☒N/A	
5.2.4 Solenoid valves	Cycle power to valve to check operation. (Electrical solenoids can be verified by listening to the plunger opening and closing. If no audible confirmation, the valve should be inspected for the presence and operation of the plunger.)	☐Yes ☐No* ☒N/A	

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Item	Task	Status	Comments
5.2.5 Fire and shear valves	a. Manually cycle the valve to ensure components are moving freely and that the valve handle or lever has clearance to allow valve to close completely.	☐Yes ☐No* ☒N/A	
	b. Valves must not be wired in open position.	☐Yes ☐No* ☒N/A	
	c. Make sure fusible element is in place and correctly positioned.	☐Yes ☐No* ☒N/A	
	d. Be sure test ports are sealed with plug after testing is complete and no temporary test fixture or component remains connected to valve.	☐Yes ☐No* ☒N/A	
5.3 Interstitial leak detection equipment	Check condition of equipment, including: • Alarm light off • Continuity light off • The wire connections of electronic gauges for tightness and corrosion	☐Yes ☐No*	
5.4 Spill containment boxes on fill pipe	a. If corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit.	☐Yes* ☐No	
	b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary.	☐Yes* ☐No	
	c. Drain valves must be operable and closed	☐Yes* ☐No	
5.5 Strainer	a. Check that the strainer is clean and in good condition.	☐Yes ☐No* ☒N/A	
	b. Access strainer basket and check cap and gasket seal as well as bolts.	☐Yes ☐No* ☒N/A	
5.6 Filter	a. Check that the filter is in good condition and is within the manufacturer's expected service life. Replace, if necessary.	☐Yes ☐No* ☒N/A	
	b. Check for leaks and decreased fuel flow	☐Yes ☐No* ☒N/A	
5.7 Flame arrestors	Follow manufacturer's instructions. Check for corrosion and blockage of air passages.	☐Yes* ☐No ☒N/A	
5.8 Leak detector for submersible pump systems	Test according to manufacturer's instructions and authority having jurisdiction (AHJ). Verify leak detectors are suited and properly installed for aboveground use.	☐Yes ☐No* ☒N/A	

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Item	Task	Status	Comments
5.9 Liquid level equipment	a. Has equipment been tested to ensure proper operation?	☐Yes ☐No* ☐N/A	Waiting for manufacturer's recommendation.
	b. Does equipment operate as required?	☐Yes ☐No* ☐N/A	
5.10 Overfill equipment	a. Follow manufacturer's instructions and regulatory requirements for inspection and functionality verification.	☐Yes ☐No* ☐N/A	Waiting for manufacturer's recommendation.
	b. Confirm device is suited for above ground use by the manufacturer	☐Yes ☐No* ☒N/A	
6.0 Insulated Tanks			
6.1 Insulation	Check condition of insulation for: • Missing sections • Areas of moisture • Mold • Damage	☐Yes* ☐No ☒N/A	
6.2 Insulation cover or jacket	Check for damage that will allow water intrusion	☐Yes* ☐No ☒N/A	
7.0 Miscellaneous			
7.1 Electrical wiring and boxes	Are they in good condition?	☐Yes ☐No* ☐N/A	
7.2 Labels and tags	Ensure that all labels and tags are intact and readable.	☐Yes ☐No* ☐N/A	NFPA label, etc.

Additional Comments: _____

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