# ENVIRONMENTAL SITE ASSESSMENT PHASE I INCLUDING SITE CHARACTERIZATION REPORT

# **APPENDIX**



# PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lanai City Expansion 200 Housing Units Lanai City, Hawaii



June 29, 2016

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Phase I Environmental Site Assessment Report Lanai City Expansion – 200 Housing Units

June 29, 2016

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# **EXECUTIVE SUMMARY**

Subject to the qualifications and limitations stated in Section 1 of this report, TRC Environmental Corporation (TRC) was retained by Pulama Lanai (PL), also referred to as Lanai Resorts, LLC (LR) (also known as "Client" or "User") to perform a Phase I Environmental Site Assessment (ESA) of approximately 103 acres located in the western portion of Lanai City in Maui County, Hawaii. The property is approximately 4 miles east of the Pacific Ocean and 0.2 mile north of Kaumalapau Highway (herein referred to as the "Site"). TRC's assessment was conducted in connection with the Client's planned development of the Site to include approximately 200 residential housing units. The Phase I ESA described in this report was performed in accordance with the scope and limitations of the American Society of Testing and Materials (ASTM) Practice E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13). Limiting conditions and/or deviations from the ASTM E 1527-13 standard are described in Sections 1.3 and 7.7 of this report.

A portion of the Site appears to have been first developed in 1942 with a Quonset shed that has been utilized by the Department of Land & Natural Resources (DLNR) as an office and storage facility since 2006. In 1948, a portion of the Site was developed with a power plant building that was operated by the Dole Company for pineapple plantation activities until 1988. Maui Electrical Company (MECO) took over the facility in 1988 and operated the power plant until 1996. MECO vacated the facility in 2000 following the removal of the last of the generating units. The facility appears to have been used for storage since that time. An electrical substation located northwest of the power plant building is still in operation.

Pineapple fields, operated by the Dole Company, appear to have encompassed the remaining portions of the Site until approximately 1991. In 1992, the Lanai City Nursery and community gardens were developed in the central portion of the Site, adjacent to overgrown vegetation adjoining the Waste Water Treatment Plant. Reportedly, the Lanai City Nursery is in the process of relocating near the airport.

In the 1980s, two dilapidated wooden structures, a former school house and a former Boy Scout hall, were relocated to the Site just to the northeast of the power plant building and electrical substation.

Hawaii Gas currently operates a distribution area located on the northwest portion of the Site. Four (4) above ground storage tanks (ASTs) including two (2) 6,400-gallon capacity and two (2) 2,000- gallon capacity, along with numerous smaller capacity upright and oblong residential style tanks, were identified during Site reconnaissance. All of these ASTs are reportedly used for propane storage. Reportedly, Hawaii Gas is planning to move to a new location away from the Site.

Two sanitary sewer lines with multiple manholes trend from the north-northeast to the southeast portion of the Site. Additionally, an electrical easement runs the length of the Site from the northernmost corner of the Site along the east portion of the nursery and community gardens to the south-southeast area of the Site and beyond.



The power plant facility operated one (1) AST that reportedly contained diesel fuel; however, the tank size is unknown and is no longer present at the Site. Associated piping and a secondary containment appear to still be located on the former power plant site. Additionally, records review indicated that two (2) underground storage tanks (USTs) were located at the former power plant site; a 25,000-gallon diesel tank and a 5,500-gallon diesel tank. The USTs were removed from the Site in 1989 and 2003, respectively. During UST removal activities, the USTs were determined to be leaking USTs (LUSTs). Soil was removed to the extent feasible; however, documents indicate that petroleum contaminated soil remains in the subsurface at the Site.

Multiple containers, totes and drums with unknown contents were observed within the community gardens. Additionally, an inoperable pineapple harvester, inoperable grader, multiple tires, car batteries, and debris piles containing green waste, trash and other debris were located throughout the Site. Although TRC did not visually identify any concerns associated with these containers, materials or debris piles, these materials should be removed and disposed of properly. Should any adversely impacted soils be identified following their removal or during future site development, the soil should be properly characterized and disposed of accordingly.

As a result of the Phase I ESA, including but not limited to our visual observation of the Site; review of historical information, environmental databases, and information provided by the User; interviews with current Site representative(s); and TRC's professional judgment, the following recognized environmental conditions (RECs) and controlled recognized environmental conditions (CRECs) associated with the Site, as defined by the ASTM E 1527-13 standard were identified:

# Recognized Environmental Conditions (RECs)

REC No. 1: Access into the former power plant building could not be obtained due to the deterioration of the locks. This prevented TRC from identifying possible RECs; however, the previous report that was provided to TRC (Section 4.3) indicated trace concentrations of polychlorinated biphenyls (PCBs) were identified in the soil. The potential exists for contamination to be present at the Site.

REC No. 2: During Site reconnaissance, a small stain was observed on the gravel under a 55-gallon drum of diesel fuel that was located in the nursery portion of the Site. The potential exists for contamination to be present at the Site.

REC No. 3: During Site reconnaissance, a storage shed located in the northeast corner of the Nursery portion of the Site was observed to house pesticide and other chemicals. The floor of this shed consisted of gravel which would not impede liquids from migrating into the soil below. The potential exists for contamination to be present at the Site.

REC No. 4: The file review and Summary Data Figure of the former Emulsion Plant (adjoining the Site) indicates that petroleum hydrocarbons, halogenated volatile organic compounds (HVOCs) and organochlorine pesticides were detected in soil, some at elevated concentrations. The file review documents and Summary Data Figure for the former Emulsion Plant are included

in **Appendix B**. The potential exists for contamination to be present at the Site in the form of soil vapor and/or groundwater migration onto the Site.

# Controlled Recognized Environmental Conditions (CRECs)

CREC No. 1: A No Further Action (NFA) letter was issued by the Hawaii Department of Health (DOH) on February 12, 2007 related to a release associated with a diesel LUST that was removed from the power plant portion of the Site. The letter and associated documents are included in **Appendix B**. The NFA indicates a small volume of petroleum-impacted soil still remains in the subsurface at the Site (below the former power plant building), and if the soil is excavated or disturbed, precautions should be taken for worker safety. The NFA also indicates that excavated soil may be reused onsite provided that any nuisance concerns are addressed and the soil is not moved to an ecologically sensitive area.

This Executive Summary is part of this complete ESA; any findings, opinions or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for all supporting information related to findings, opinions and conclusions.

#### Legal Notice

This document was prepared by TRC solely for the benefit of the User. With regard to third-party recipients of this document, neither TRC, nor the Client, nor the User, nor any of their respective parents, affiliates or subsidiaries, nor any person acting on their behalf: (a) makes any warranty, expressed or implied, with respect to the use of any information or methods disclosed in this document; or (b) assumes any liability with respect to the use of any information or methods disclosed in this document. Any third-party recipient of this document, by its acceptance or use of this document, releases TRC, the Client, the User, and their parents, affiliates and subsidiaries, from any liability for direct, indirect, economic, incidental, consequential or special loss or damage whether arising in contract, warranty, express or implied, tort, or otherwise, and irrespective of fault, negligence, and strict liability.



TRC Environmental Corporation (TRC) has prepared this Phase I Environmental Site Assessment (ESA) for Pulama Lanai also referred to as Lanai Resorts, LLC (hereinafter "Client" or "User"). This report was prepared for and may be relied upon by Client for the purposes set forth herein; it may not be relied on by any party other than the Client and reliance may not be assigned without the express approval of TRC. Authorization for third party reliance on this report will be considered by TRC if requested by the Client. TRC reserves the right to deny reliance on this report by third parties.

# 1.1 Purpose and Scope of Services

The following Phase I ESA was performed for the reportedly 103-acre property located in the western portion of Lanai City in Maui County, Hawaii. The property is approximately 4 miles east of the Pacific Ocean and 0.2 mile north of Kaumalapau Highway (herein referred to as the "Site"). A Site location map is included as **Figure 1**. This Phase I ESA has been prepared by TRC in accordance with the American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13), and is intended for the sole use of Pulama Lanai also referred to as Lanai Resorts, LLC as per the email approval dated May 16, 2016.

The purpose of this assessment is to identify *Recognized Environmental Conditions* (RECs) at the Site, as defined by the ASTM E 1527-13 standard. The completion of this Phase I ESA report may be used to satisfy one of the requirements for the User to qualify for the *innocent landowner*, contiguous property owner, or bona fide prospective purchaser limitations pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice as defined by 42 U.S.C. §9601(35)(B) of CERCLA.

TRC understands that this assessment is not funded with a federal grant awarded under the United States Environmental Protection Agency (U.S. EPA) Brownfields Assessment and Characterization program.

The Scope of Services for this Phase I ESA included the following tasks:

- · Site and vicinity reconnaissance;
- Site and vicinity description and physical setting;
- · Historical source review and description of historical Site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials;
- · Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable:
- Review of environmental liens, if provided or authorized to obtain by the User; and
- Preparation of a report summarizing findings, opinions and conclusions.



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Pursuant to the ASTM E 1527-13 standard, recommendations to conduct Phase II sampling or other assessment activities are not required to be included in this report. TRC can provide such recommendations upon request.

#### 1.2 Additional Services

Items outside the scope of the ASTM E 1527-13 standard include, but are not limited to, the following:

- Asbestos-containing building materials
- Radon
- · Lead-based paint
- · Lead in drinking water
- Wetlands
- · Regulatory compliance
- · Cultural and historic resources
- · Industrial hygiene

- · Health and safety
- Ecological resources
- Endangered species
- Indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment
- · Biological agents
- Mold

No additional services were performed outside the scope of the ASTM E 1527-13 standard.

#### 1.3 Deviations to ASTM E 1527-13 Standard

No significant deviations or deletions to the ASTM standard were made during this Phase I ESA.



# 2.0 SITE DESCRIPTION

#### 2.1 Site Location and Legal Description

The approximately 103-acre Site is identified as encompassing portions of parcels 2-4-9-014:001, 2-4-9-014:009, and 2-4-9-002:001, and is located in the western portion of Lanai City in Maui County, Hawaii. The Site is approximately 4 miles east of the Pacific Ocean and 0.2 mile north of Kaumalapau Highway in a mixed agricultural/industrial/residential area. The Site is zoned as open space and agricultural land, and is currently owned by Lanai Resorts, LLC. A Site location map is included as **Figure 1**.

### 2.2 Site Improvements

Current onsite improvements are listed in the following table. A Site layout plan is included as **Figure 2**.

**Table 2.1 - Site Improvements** 

Site Feature	Description
Buildings (stories)	One (1) Quonset shed located on the eastern portion of the Site. One (1) single story building (former power plant facility), one (1) collapsed former single story former school house and one (1) single story former Boy Scout hall located on the northeastern portion of the Site. Multiple single-story wood and metal structures to facilitate nursery operations.
Construction date(s)	Quonset shed – 1942; Former Power Plant Facility – 1948; Former school house and former Boy Scout hall – Relocated to the Site in 1980s (construction dates unknown).
Exterior areas	Nursery (process of being relocated), community gardens, Hawaii Gas distribution area, overgrown vegetation.
Onsite roads/rail lines	Awalua Avenue, 9th Street, 12th Street
Other large equipment	Inoperable grader and pineapple harvester
Potable water supply	Community Water Supplier (Lanai City)
Sewage disposal system(s)	Municipal Sanitary Sewer System Portable toilet facilities (used at the Nursery)
Heating/Cooling system fuel source(s)	Window unit air conditioning in the nursery office
Back-up fuel source(s)	N/A
Electricity supplier(s)	Maui Electrical Company (MECO)
Storm water system	Municipal storm water drain system

#### 2.3 Current and Historical Site Use

# 2.3.1 Current Site Use(s)

The Site is currently operated by DLNR; Lanai City Nursery; individuals utilizing the community garden area; and Hawaii Gas, as a distribution area. The former power plant building has



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reportedly not been accessed in years and is currently being used to store boxes of files. An electrical substation located northwest of the power plant building remains in operation.

Two sanitary sewer lines with multiple manholes trend from the north-northeast to the southeast portion of the Site.

#### 2.3.2 Previous Owner and Operator Information

Based on information provided by the User (Section 3), the historical record review (Section 4), and/or interviews conducted during this Phase I (Section 6), a portion of the Site appears to have been first developed in 1942 with the Quonset shed, but it is unknown what it was used for prior to 2006 when DLNR began a lease to use it as an office and storage facility. In 1948, a portion of the Site was developed with a power plant building that was operated by the Dole Company for pineapple plantation activities until 1988. Maui Electrical Company (MECO) took over the facility and operated the power plant until 1996. MECO vacated the facility in 2000 following the removal of the last of the generating units. The facility appears to have been used for storage since that time. An electrical substation located northwest of the power plant building is still in operation. Pineapple fields, operated by the Dole Company, appear to have encompassed the remaining portions of the Site until approximately 1991.

In the 1980s two dilapidated wooden structures, a former school house and a former Boy Scout hall, were relocated to the Site just to the northeast of the power plant building and electrical substation.

Castle & Cooke appears to have taken over ownership of the Dole Company in the 1960s. Mr. David Murdock acquired Castle & Cooke in 1985. Lanai Resorts, LLC purchased the Site from Castle & Cooke in 2012.

#### 2.4 Physical Setting

According to the United States Geological Survey (USGS) topographic map, Lanai North and Lanai South quadrangle dated 2013 Lanai (Figure 1), the Site is located approximately 4 miles east from the Pacific Ocean. The Site topographic elevation is approximately 1,545 feet above mean sea level (MSL), and local topography slopes to the south-southwest. The topographic downward slope observed at the Site during the Site reconnaissance is generally towards the south-southwest. Based on local topography and historical environmental reports provided to TRC, as applicable, the assumed direction of shallow groundwater flow is to the south-southwest, towards the Pacific Ocean. However, a subsurface investigation would be required to determine actual groundwater flow direction.

The database radius report supplied by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut was reviewed to obtain information regarding the dominant soil composition in the Site vicinity. This information is summarized below:

Hydric Status: Unknown

Soil Surface Texture: Clay and silty clay



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Soil Component Name: Waihuna and Lahaina Deeper Soil Types: Clay and silty clay

Please refer to the Geocheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in the Site vicinity.

Per Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map 150030500F (Panel 500 of 825), dated September 19, 2012, the Site is located in Zone X (unshaded). According to FEMA's Flood Zone Designations, Zone X represents a minimal flood hazard; that is, those areas outside the Special Flood Hazard Area (SFHA) and higher than the elevation of the 0.2-percent-annual-chance flood. The FEMA Flood Insurance Rate Map is provided in **Appendix B**.

# 3.0 USER PROVIDED INFORMATION

According to the ASTM E 1527-13 standard, certain tasks that may help identify the presence of RECs associated with the Site are generally conducted by the Phase I ESA User. These tasks include providing, or authorizing the *environmental professional* to obtain recorded land title records for environmental liens or activity and land use limitations (AULs); providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); providing commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to RECs in connection with the *property*; and informing the *environmental professional* if, as believed by the User, the purchase price of the *property* is lower than the fair market value due to contamination. A list of requested information was included in TRC's proposal (see Section 1.1). Information provided by the User pursuant to that request is listed in Section 8.0. A copy of the User questionnaire is included in **Appendix C**.

# 3.1 Title & Judicial Records for Environmental Liens or Activity and Use Limitations

The User did not provide any information regarding environmental concerns associated with title or judicial records, or the existence of environmental liens or activity and use limitations (AULs) for the Site. Completion of an additional title and judicial record search was beyond the scope of this Phase I ESA, was not requested by the Users, and remains a User requirement.

#### 3.2 Specialized Knowledge

The User was not aware of specialized knowledge related to RECs at the Site.

# 3.3 Property Value Reduction Issues

The User was not aware of property valuation reduction issues regarding the Site.

# 3.4 Commonly Known or Reasonably Ascertainable Information

TRC was supplied with commonly known and/or reasonably ascertainable information regarding the Site by Mr. A.J. Vergara of Pulama Lanai. This information was used during this Phase I ESA and has been incorporated in this report as applicable.

# 3.5 Reason for Conducting Phase I

It is TRC's understanding that the User requires a Phase I to qualify for Innocent Landowner defense to CERCLA liability.





# 4.0 RECORDS REVIEW

#### 4.1 Historical Use Information

Information regarding Site and vicinity historical uses was obtained from various publicly available and practically reviewable sources including:

- Aerial photographs (scale: 1" = 750') dated 1952; (scale: 1" = 500') dated 1965 and 1992; (scale 1" = 1,000') dated 1976;
- Topographic maps dated 1923, 1925, 1984, 1992, and 2013;
- City directories dated 1992, 1995, 1999, 2003, 2008, and 2013;
- · Local municipal records;
- · An environmental database report; and
- Interviews with Site representative(s) and regulatory agency official(s), as necessary.

Historical research documentation is included in Appendix D.

Historical Sanborn® Fire Insurance Maps (Sanborn Maps) were originally produced for assessing fire insurance liability in urban areas in the United States. The maps provide detailed information (i.e., building construction, facility occupants, storage tank locations, and hazardous material storage areas), which can be used as a resource to document land use and structural change over time. Research concerning the availability of Sanborn Maps in the vicinity of the Site was conducted by EDR; however, EDR stated that Sanborn Map coverage does not exist for the Site or nearby surrounding area. The absence of maps for a specific area may signify the area was not significantly developed at the time at which the maps were published.

# 4.1.1 Site History

# **Operational History**

Table 4.1 - Site History

Year	Site History
1920 – 1941	Lanai City was reportedly first developed in the early 1920s, which is when pineapple plantation activities most likely began on the Site.
1942 – 1947	The Maui County Tax Assessor indicates the Quonset shed was built on the Site in 1942. It is unknown what the shed was used for.
1948 – 1988	The power plant was built on the site in 1948. The power plant was reportedly operated by the Dole Company to support pineapple plantation operations until 1988. In the 1980s, the former school house and former Boy Scout hall were relocated onto the Site.
1988 – 1996	The Maui Electric Company (MECO) operated the power plant. As of 1992, the pineapple plantations ceased operations, and the nursery and community gardens were developed on the Site.



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Table 4.1 - Site History

Year	Site History
1996 – 2003	The power plant stopped operating in 1996 and MECO vacated the premises in 2000 following the removal of the last two generating units. At this point, the facility appears to be utilized for storage. In 2003, an evaluation of the power plant was completed (Section 4.3). The evaluation report indicated petroleum-contaminated soil was present on the Site (no additional information regarding this soil contamination could be identified by TRC). Additionally, the evaluation report indicated that trace amounts of polychlorinated biphenyls (PCBs) were present in the soil on the Site.
2003 – Present	DLNR leases the Quonset shed from Lanai Resorts to operate as offices and storage facility in 2006. The power plant located on the Site continues to serve as storage. The nursery operates on the Site, but is in the process of moving to a new location. Residents of Lanai rent out the community garden areas, and use these areas to grow gardens or raise animals. Hawaii Gas operates a distribution area on the Site, but is also in the process of moving.

# 4.1.2 Adjoining Property History

Table 4.2 - Adjoining Property History

Year	Adjoining Property History	
North	From at least 1952 until as late as 1991, the area to the northwest of the Site was utilized as pineapple fields as depicted in aerial photographs. Since 1992, this area to the northwest has been undeveloped agricultural land. The aerial photographs depict the area to the north-northeast of the Site as a mix of residential and commercial properties from at least 1952.	
East	From at least 1952, the area east of the Site appears to be a mix of residential and commercial properties as depicted in aerial photographs. Fraser Avenue was present from at least 1984.	
South	From at least 1952 until as late as 1991, the area south of the Site was utilized as pineapple fields as depicted in aerial photographs. The aerial photographs depict several structures located to the southeast of the site from at least 1952 through at least 1976. The 1992 aerial photograph depicts different structures located in this southeast area. Per the Maui County Tax Assessor, these structures were developed in 1998 and 1990. 12th Street appears to have been developed to the south and southeast of the Site from as early as 1992 with a light industrial development beyond.	
West	From at least 1952 until as late as 1989, the aerial photographs depict ponds and undeveloped land to the west-southwest of the Site. The Maui County Tax Assessor indicates the waste water treatment plant facility, located to the west-southwest of the Site, was constructed to the southwest of the Site in 1990.	



File Review Summary

## 4.1.3 Surrounding Property History

Table 4.3 - Surrounding Property History

	Surrounding Property History
North	From at least 1952 to 1991, the area to the northwest was utilized as pineapple fields; from 1991 to the present this northwest area has consisted of undeveloped agricultural land. From at least 1952 to the present, the area to the north-northeast of the Site has been developed with a mix of residential and commercial properties.
East	From at least 1952 to the present, this area has consisted of a mix of light industrial and commercial and residential development.
West	Prior to 1992, this area was a mix of pineapple fields and undeveloped agricultural; between 1992 to the present, this area was developed as county-owned waste water treatment plant land with undeveloped, agricultural land beyond.
South	The roadway known as Kaumalapau Highway is located to the south of the Site from at least 1952 with pineapple fields beyond until 1991. From 1992 to the present, the land appears to be undeveloped agricultural land.

# 4.2 Database Report & Environmental Record Review

A database search report that identifies properties listed on state and federal databases within the ASTM-required radii of the Site was obtained from EDR and is included in **Appendix A**.

The environmental database report identified 19 properties/listings including adjoining properties. These properties included those that could be mapped and those that could not (i.e., orphan properties). The Site was not listed in the database search report; however, after file review, it was determined that the following listing is associated with the Site.

# 4.2.1 Subject Site

Site information included in the database search report is summarized in the following table:

Site Facility Name(s) and/or Listed Address(es)	Dole Lanai Plantation – 750 Lanai Avenue (Power Plant), Lanai City, HI 96763
EDR Map No(s).	C11
Database(s)	Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST)
Description/ID No(s).	EDR ID: U001236610 and Release IDs: 900013 and 030016
Database Review Summary	This property is listed with two (2) LUST case files which have been reported as cleaned up with NFA status issued on 09/15/2006 and 02/12/2007. The two (2) UST listings (Tank IDs R-L1 and L6) have current statuses of Permanently Out of Use. Tank R-L1 was closed on 10/01/1989 and tank L6 has no closing date documented.



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File review indicated that the two (2) USTs located at the former power plant site included a 25,000-gallon diesel tank and a 5,500-gallon diesel tank that were removed from the site in 1989 and 2003, respectively. During UST removal activities, the USTs were determined to be LUSTs, and soil was removed to the extent feasible. Some of the soil removed during the removal of the 25,000-gallon tank was stockpiled on the site, and following subsequent sampling activities, was to be used as fill material as approved by DOH.

NFA letters were issued in response to the two LUST case files dated September 5, 2006 and February 12, 2007. The February 12, 2007 letter indicates that a small amount of petroleum contaminated soil remains in the sub-surface at the Site (below the former power plant building), and if the soil is excavated or disturbed, precautions should be taken for worker safety. The NFA also indicates that excavated soil may be reused onsite provided that any nuisance concerns are addressed and the soil is not moved to an ecologically sensitive area.

# 4.2.2 Adjoining and Surrounding Property Record Review

TRC evaluated the following factors to determine whether additional environmental records should be reviewed with respect to the potential for contaminant migration from the adjoining and surrounding properties:

- (1) Whether the property is upgradient or downgradient of the Site vis-à-vis groundwater migration based on the local topography, and the assumed groundwater depth and southsouthwest shallow groundwater flow direction;
- (2) Whether the property is upgradient or downgradient of the Site vis-à-vis vapor migration based on readily available information pursuant to the ASTM E 1527-13 standard including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, storm sewers, and significant natural conduits such as Karst terrain (vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);
- (3) Property case status (i.e., whether the Hawaii DOH or applicable regulatory authority has issued a NFA letter or other similar closure document):
- (4) Type of database and whether the presence of contamination is known; and
- (5) The distance between the listed property and the Site.

Based on this evaluation, TRC limited the review of additional environmental records to the properties listed below, since the potential for contamination to be migrating to the Site from the other properties identified by the database search is considered low.

# 4.2.2.1 Adjoining Properties

Adjoining property information included in the database search report is summarized in the following table:



Facility Name(s) and/or Address(es)	Dole Lanai Plantation – 750 Lanai Avenue (Emulsion Plant – Fraser Ave), Lanai City, HI 96763
Approximate Location Relative to Site	File review indicated this Site adjoins the subject property, as it was located at the corner of Fraser Ave and $12^{\rm th}$ Street, to the south of the southeastern most corner of the Site.
EDR Map No(s).	C12
Database(s)	UST
Description/ID No(s).	EDR ID: U001236615
Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	This property is listed with two (2) UST listings (Tank IDs R-L7A and R-L7B) which have current statuses of Permanently Out of Use with no closing date documented.

Based on the above listing, TRC conducted a file review for the Emulsion Plant of available files maintained at the Hawaii DOH and a summary report provided by the Client (Section 4.3).

Based on files provided by the DOH, the Emulsion Plant facility was used by Dole as an agricultural chemical mixing and storage area. Additionally, two 10,000-gallon USTs were removed in 1989. The USTs were used for diesel fuel storage from 1947 through the late 1970s and Telone II (1,3-dicholopropene) from the late 1970s through the mid-1980s. During removal, numerous holes were observed along the base of both USTs and soil samples contained petroleum hydrocarbons and halogenated volatile organic compounds (HVOCs). Further site characterization activities identified detectable concentrations of petroleum hydrocarbons, HVOCs and organochlorine pesticides.

TRC understands that soil sampling activities are ongoing at the former Emulsion Plant location. Due to the proximity of the former Emulsion Plant to the Site and the known presence of petroleum hydrocarbons, HVOCs, and organochlorine pesticides associated with this Site, this facility is presently a concern to the Site.

# 4.2.2.2 Surrounding Properties

Surrounding property information included in the database search report is summarized in the following tables:

Facility Name(s) and/or Address(es)	Oshiro Enterprises, Inc. (and Oshiro Service Station) – 850 Fraser Avenue, Lanai City, HI 96763
Approximate Location Relative to Site	0.056 miles to the northeast (and 0.142 miles to the north)

EDR Map No(s).	A2 (and B6)
Database(s)	LUST, UST, Resource Conservation Recovery Act (RCRA) Non Generator (Non Gen)
Description/ID No(s).	EDR ID: U003222163, Release ID: 900130 and EPA ID: HID984470153
Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	Oshiro Enterprises, Inc. is listed with a LUST case file which has been reported as cleaned up with NFA status issued on 01/19/2001. Two (2) UST listings (Tank IDs R-1 and R-2) have a current status of Permanently Out of Use as of 06/24/1993. In addition, Oshiro Service Station is listed in the RCRA Non Gen database with no violations found. Based on the current regulatory status, it is not expected that this facility is presently a concern to the Site.

Facility Name(s) and/or Address(es)	Lanai Central Office – 423 Ninth Street, Lanai City, HI 96763			
Approximate Location Relative to Site	0.11 miles to the northeast			
EDR Map No(s).	Al			
Database(s)	LUST, UST			
Description/ID No(s).	EDR ID: U001236609 and Release ID: 960052			
Presumed Hydrogeologic Setting	Upgradient			
Database Review Summary	This property is listed with a LUST case file which has been reported as cleaned u with NFA status issued on 08/02/1996. Three (3) UST listings are associated wit the property. Two listings (both with Tank IDs of R-1) have a current status of Permanently Out of Use as of 03/29/1989. The third UST listing (Tank ID M-2) if or a new 600-gallon UST that was installed in 1996 and is reportedly still in use Based on the current regulatory status, it is not expected that this facility is presently a concern to the Site.			

Facility Name(s) and/or Address(es)	Lanai High and Elementary School – 555 Fraser Avenue, Lanai City, HI 96763		
Approximate Location Relative to Site	0.14 miles to the north		
EDR Map No(s).	B5		
Database(s)	State Hazardous Waste Site (SHWS)		
Description/ID No(s).	EDR ID: S110061631		



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Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	This property is identified as a state hazardous waste site; however, additional details were not provided. This listing was issued a NFA letter dated 7/14/2010 and thus does not represent a concern to the Site.

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Facility Name(s) and/or Address(es)	Dole Lanai Plantation – 730 Lanai Avenue (DD Farm – Field 5303), Lanai City, HI 96763		
Approximate Location Relative to Site	0.6 miles to the southeast based on the DOH file review		
EDR Map No(s).	C9		
Database(s)	LUST, UST		
Description/ID No(s).	EDR ID: U001236617 and Release ID: 930036		
Presumed Hydrogeologic Setting	Downgradient		
Database Review Summary	This property is listed with a LUST case file which has been reported as cleaned up with NFA status issued on 07/03/2001. The UST listing (Tank ID: R-L9) has a current status of Permanently Out of Use as of 09/03/1990. Based on the current regulatory status, it is not expected that this facility is presently a concern to the Site.		

Facility Name(s) and/or Address(es)	Dole Lanai Plantation – 730 Lanai Avenue (Kaumalapau Hwy. Field 5520), Lanai City, HI 96763			
Approximate Location Relative to Site	2 miles to the southwest based on the DOH file review			
EDR Map No(s).	010			
Database(s)	LUST, UST			
Description/ID No(s).	EDR ID: U001236613 Release ID: 900129			
Presumed Hydrogeologic Setting	Downgradient			
Database Review Summary	This property is listed with a LUST case file which has been reported as cleaned up with NFA status issued on 08/28/2001. The three (3) UST listings (Tank IDs: R-L2, R-L3, R-L4) have a current status of Permanently Out of Use with no date documented. Based on the proximity to the Site, it is not expected that this facility is presently a concern to the Site.			

# 4.3 Previous Reports

The following environmental reports regarding the Site were provided for TRC's review:

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- January 2014, Summary Data Figure for the Former Emulsion Plant Area, Lanai City, Lanai, Hawaii prepared by EnviroServices & Training Center LLC (**Appendix B**).
- May 21, 2003, An Evaluation of the Old Lanai Electrical Plant for Lanai Company, prepared by Maui Architectural Group, Inc. (Appendix B).

Information provided in these reports is summarized throughout this report.

# 4.4 Other Environmental Record Sources

As part of the assessment, records were requested for the target property from County of Maui, Hawaii – Department of Environmental Management and State of Hawaii DOH. The requests were submitted via written correspondence. Information from these sources is discussed below:

Table 4.4 - Other Environmental Record Sources

MUNICIPAL/STATE REGULATORY AGENCY/ DEPARTMENT	Available Information	
State of Hawaii Department of Health	DOH UST division provided UST and LUST records as related to the following former Dole Lanai Plantation facilities: Power Plant, Emulsion Plant, DD Farm – Field 5303 and Kaumalapau Hwy Field 5520. Information regarding these files is discussed in Section 4.2.	
County of Maui – Department of Environmental Management, Wastewater Reclamation Division (WWRD)	The response from the WWRD indicated there are significant trunk sewer line manholes that are owned, operated and maintained by the County of Maui traverse the site. The last analysis of the system condition in 2009 shower these lines are in very good condition. WWRD does not have any record indicate any past problems or sewer spills in the area.	
County of Maui – Department of Environmental Management (DEM)	The response from the DEM indicated they have no comments concerning the Site.	



#### 5.1 Methodology and Limiting Conditions

Ms. Kacey Swindle, Industrial Hygienist, conducted a Site reconnaissance of accessible areas on and around the Site on June 2, 2016 for the purpose of identifying potential RECs, and was accompanied by Mr. A.J. Vergara, Engineering Coordinator, Mr. Matt Kawasaki and Mr. Elmer Agtarap of Pulama Lanai who provided access to the property and answered questions during the reconnaissance. Ms. Kacey Swindle conducted an additional Site reconnaissance visit on June 21, 2016 to assess additional areas that were not initially included within the scope of the assessment. Photographs taken during the reconnaissance are provided in **Appendix E**. A Site layout plan is included as **Figure 2**.

During the Site reconnaissance, there was limited or no access to several areas due to overgrown vegetation (i.e., thick grass approximately 8 feet tall or overgrown wooded areas). In addition, access to the interior of the former power plant building was not possible, as the doors could not be unlocked via the existing keys due to deterioration of the locks. The former Boy Scout hall and adjacent collapsed school house were not accessible due to safety concerns and overgrown vegetation. Finally, the community gardens were not individually accessed, as they are individually rented areas that were locked and many contained live animals. There was no access to the evidence storage room at the DLNR Quonset shed, as it was locked and personnel with the keys were not present at the time of the Site reconnaissance. These limiting conditions could possibly impact the results of this Phase I ESA because the ability to identify possible RECs was inhibited.

# 5.2 Interior and Exterior Site Observations

Unless otherwise noted, the items listed in the table below appeared in good condition with no visual evidence of staining, deterioration or a discharge of hazardous materials; and there are no records of a release in these areas. Items where further description is warranted are discussed in the section(s) following the table.

Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/ Historic/ No)	Description
Hazardous material storage or handling areas	Yes	(see Section 5.2.1)
ASTs and associated piping	Yes	(see Section 5.2.2)
ASTs and associated piping	Historic	A former diesel AST was once located on the Site to the south of the former power plant building, as a secondary containment berm and associated piping were observed within this area. However, no additional information was provided regarding this.



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Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/ Historic/ No)	Description
USTs and associated piping	Historic	Two (2) USTs located at the former power plant site included a 25,000-gallon diesel tank and a 5,500-gallon diesel tank that were removed from the site in 1989 and 2003, respectively.
Drums and containers (≥5 gallons)	Yes	One 55-gallon drum of diesel was observed in good condition in the nursery.  One 5-gallon drum of an unknown substance (appeared to be rainwater, as no sheens were noted) was located in the area of Hawaii Gas.  Multiple drums and containers were observed within the community garden area. It is unknown what the drums and containers contained.
Odors	No	
Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)	No	
PCBs / Transformers	Yes	Utility-owned and operated pole- and pad-mounted transformers were observed on and adjacent to the Site, and it is unknown if the transformers may contain PCBs.
Stains or corrosion	Yes	Small staining around the diesel tank in nursery
Drains and sumps	Yes	Drain pipes were observed throughout the Site to facilitate storm water flow.
Pits, ponds and lagoons	No	
Stressed vegetation	No	
Historic fill or any other fill material	Yes	Fill dirt appears to have been placed in the area to the east- northeast of the Waste Water Treatment Plant (WWTP). It is likely this dirt was moved into this area following the closure of the pineapple plantation and the development of the WWTP ponds.
Wastewater (including storm water or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)	Yes	Two (2) sanitary sewer lines run from the north-northeast to the southeast portion of the Site with multiple manholes.  The WWTP was located to the southwest of the Site.
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)	No	
Septic systems or cesspools	Yes	Portable restrooms rented through Paradise Lua Rainbow Rentals provide restroom facilities for the nursery.

# 5.2.1 Hazardous Substances

Hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the Site; and unidentified substance containers (when open or damaged, and



containing unidentified substances suspected of being hazardous or petroleum products) are listed in the following table:

Table 5.2 - Current Site Hazardous Substances

Material Name	Approximate Quantity On Site During Reconnaissance (gallons/lbs.)	Storage Containers & Conditions*		
Hydraulic Oil/Fluid	10 gallons	Two (2) 5-gallon buckets were observed in the Hawaii Gas portion of the Site in poor condition.		
Paint	Less than 3 gallons	One (1) container was observed in the Hawaii Gas portion of the Site in poor condition.  One (1) container was observed in an office on the DLNR portion of the Site in fair condition.  One (1) container was observed in the DLNR flammable storage cabinet in good condition.		
Leaf Shine (aerosol cans)	5 cans	Retail sized cans were observed within the nursery portion of the Site in good condition.		
Lubricants	1 gallon	One (1) container was observed in the flammable storage cabinet located on the nursery portion of the Site in good condition.		
Oil	40 quarts	Multiple retail-sized containers were observed on the nursery portion of the Site in good condition.  Multiple retail sized containers were observed in the DLNR flammable storage cabinet in fair condition.		
Gasoline	30 gallons	Multiple containers ranging in size between 1 and 5 gallons were observed in the flammable cabinet located on the nursery portion of the Site in good condition.  Multiple containers were observed in the in the DLNR flammable cabinet in good to fair condition.		
Antifreeze	2 gallons	Retail-sized containers were observed within the nursery portion of the Site in good condition.		
Paint Thinner	1 gallon	One container was observed within the nursery portion of the Site in good condition.		
Diesel	55 gallons	One (1) 55-gallon drum of diesel was observed within the nursery portion of the Site in fair condition. A small stain was observed on the gravel below the tank.		
Liberate® Penetrant	24 gallons	23 1-gallon containers were observed within the Pesticide Storage area on the nursery portion of the Site. 20 of the containers were located in cardboard boxes that appeared to be damaged. The containers themselves were observed in good condition.		
Roundup Pro Concentrate	2.5 gallons	One (1) container was observed within the Pesticide Storage area on the nursery portion of the Site in good condition.		
TurfTrax® Blue HC	3 quarts	Three (3) containers were observed within the Pesticide Storage area on the nursery portion of the Site in good condition.		
Spray Paint	26 cans	Retail-sized cans were observed in cardboard boxes within a storage building located on the nursery portion of the Site in good condition.		



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Table 5.2 - Current Site Hazardous Substances

Material Name	Approximate Quantity On Site During Reconnaissance (gallons/lbs.)	Storage Containers & Conditions*
		Retail-sized cans were observed in the in the DLNR
		flammable storage cabinet in good condition.
Pendulum AquaCap	15 gallons	One (1) 15-gallon container was observed on a wooden pallet
Herbicide	13 gallolis	on the nursery portion of the Site in good condition.
Other Chemicals	Unknown	Multiple retail-sized containers were observed in the DLNR flammable storage cabinet.

# \* - Definition of conditions

Compromised: Obvious holes in container or visual evidence of a release.

Poor: Container appears dented, bulging, rusted, or visual evidence of spillage. Fair: Container appears intact with visual traces of rust.

Good: No visual evidence of container damage.

Excellent: Container appears like new.

# 5.2.2 Aboveground Storage Tanks

Hawaii Gas currently maintains four (4) ASTs at the Site, as summarized in the table below.

Table 5.3 - Site Aboveground Storage Tanks

	Aboveground Storage Tanks (ASTs)				
Tank ID	Contents	Capacity (gallons)	Location	Status	
Unknown	Propane	6,400	Hawaii Gas Located in the north-northwest portion of the Site	Two (2) 6,400-gallon tanks were present in this location. The tanks were observed to be in good condition with no signs of staining on the ground around the ASTs. These ASTs appeared to be used for distribution purposes. No secondary containment was observed.	
Unknown	Propane	2,000	Hawaii Gas Located in the north-northwest portion of the Site	Two (2) 2,000-gallon tanks were present in this location. The tanks were observed to be in good condition with no signs of staining on the ground around the ASTs. These ASTs appeared to be used for distribution purposes. No secondary containment was observed.	

In addition to the above listed tanks, approximately 39 upright, residential-sized, approximately 19 oblong, residential-sized and two 5-gallon tanks were observed on the Hawaii Gas location in the north-northwest portion of the Site. It is unknown if these tanks contained propane or were empty. No evidence of spills or releases from these ASTs was observed by TRC during the Site reconnaissance. None of the tanks were located within secondary containment, as this Site appears to be a distribution location for Hawaii Gas.



## 5.3 Adjoining and Surrounding Properties Reconnaissance

#### 5.3.1 Adjoining Properties

During the Site reconnaissance, TRC viewed the adjoining properties from the Site and publicly accessible areas (e.g., public roadways, etc.).

Table 5.4 - Adjoining Properties Reconnaissance

Direction from Site	Current Land Use Description	
North-Northwest	Undeveloped county owned land	
North-Northeast	Football and baseball fields	
East-Northeast	Police station, churches, and Fraser Avenue	
East-Southeast	Storage containers on unpaved gravel parking lot (former Emulsion Plant location) and warehouses	
South-Southeast	Light industrial development (recycling center)	
South	12th Street followed by undeveloped agricultural land	
South-Southwest	Maui County Highway Department	
West-Southwest	Waste Water Treatment Plant	

#### 5.3.2 Surrounding Properties

Surrounding properties generally include mixed commercial/residential to the north and east and undeveloped agricultural land to the south and west.



The following persons were interviewed to obtain historically and/or environmentally-pertinent information regarding RECs associated with the Site.

- Mr. A.J. Vergara, Engineering Coordinator with Pulama Lanai Key Site Manager and Representative for the Owner
- · Captain Preza, Lanai Fire Department

The information provided by each is discussed and referenced in the text or provided below. Other references and sources of information are included in **Appendix B**.

Mr. Vergara was unaware of any hazardous materials incidents, spills, or any other potential environmental threats or conditions that may pose a past, present, or material threat of release to the Site.

Captain Preza mentioned the former power plant, but was unaware of any hazardous materials incidents, spills, or any other potential environmental threats or conditions that may pose a past, present, or material threat of release to the Site.



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# 7.0 FINDINGS, OPINIONS AND CONCLUSIONS

Potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs) and *de minimis* conditions, pursuant to the ASTM E 1527-13 standard.

RECs are defined as the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (1) due to any *release* to the environment; (2) under conditions indicative of a *release* to the *environment*; or (3) under conditions that pose a *material threat* of a future *release* to the *environment*.

CRECs are defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

HRECs are defined as a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations, institutional controls*, or *engineering controls*).

De minimis conditions are defined as a condition that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis conditions* are not RECs nor CRECs.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 at the approximately 103-acre property located in the western portion of Lanai City in Maui County, Hawaii approximately 4 miles east of the Pacific Ocean and 0.2 mile north of Kaumalapau Highway (see **Appendices F and G**). Deviations from this standard are described in Sections 1.3 and 7.6 of this report.

# 7.1 RECs and CRECs

This assessment has revealed the following evidence of RECs in connection with the Site:

REC No. 1

TRC could not obtain access into the former power plant building due to the deterioration of the locks. This prevented TRC from identifying possible RECs; however, the previous report that was

provided to TRC (Section 4.3) indicated trace concentrations of PCBs were identified in the soil. The potential exists for contamination to be present at the Site.

#### REC No. 2

During Site reconnaissance, a small stain was observed on the gravel floor under a 55-gallon drum of diesel fuel that was located in the nursery portion of the Site. The potential exists for contamination to be present at the Site.

#### REC No. 3

During Site reconnaissance, a storage shed located in the northeast corner of the nursery portion of the Site was observed to house pesticide and other chemicals. The floor of this shed consisted of gravel which would not impede liquids from migrating into the soil below. The potential exists for contamination to be present at the Site.

#### REC No. 4

The file review and Summary Data Figure of the former Emulsion Plant (adjoining the Site) indicates that petroleum hydrocarbons, HVOCs, and organochlorine pesticides were detected in soil, some at elevated concentrations. The file review documents and Summary Data Figure for the former Emulsion Plant are included in **Appendix B**. The potential exists for contamination to be present at the Site in the form of soil vapor and/or groundwater migration onto the Site.

#### CREC No. 1

A NFA letter was issued by the DOH on February 12, 2007 related to a release associated with a diesel LUST that was removed from the power plant portion of the Site. The letter and associated documents are included in **Appendix B**. The NFA indicates a small volume of petroleum-impacted soil still remains in the subsurface at the Site (below the former power plant building), and if the soil is excavated or disturbed, precautions should be taken for worker safety. The NFA also indicates that excavated soil may be reused onsite provided that any nuisance concerns are addressed and the soil is not moved to an ecologically sensitive area.

# Opinion Regarding Additional Investigation

It is TRC's opinion that a subsurface investigation would be necessary to confirm the presence of hazardous materials in the environmental associated with the identified RECs.

#### 7.2 HRECs

This assessment has revealed no evidence of HRECs in connection with the Site.



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#### 7.3 De Minimis Conditions

This assessment has revealed no evidence of de minimis conditions in connection with the Site.

#### 7.4 Data Gaps

TRC has made an appropriate inquiry into the commonly known and reasonably ascertainable resources concerning the historical ownership and use of the Site back to the first development per 40 CFR Part 312.24 (*Reviews of Historical Sources of Information*). Data gaps identified during this assessment include the following:

- 1. Failure to obtain specific information or files on the past usage or ownership of the Site.
- The former Boy Scout hall and adjacent collapsed former school house were not accessible during Site reconnaissance due to safety concerns and overgrown vegetation.
- The community gardens were not individually accessed during Site reconnaissance, as they are individually rented areas that were locked and many contained live animals.
- 4. There was no access to the evidence storage room at the DLNR Quonset shed, as it was locked and personnel with the keys were not present at the time of the Site reconnaissance.
- 5. There was no access to several areas of the Site during Site reconnaissance due to overgrown vegetation (i.e., thick grass approximately 8 feet tall or overgrown wooded areas)
- Access to the interior of the former power plant building was not possible during Site reconnaissance, as the doors could not be unlocked via the existing keys due to deterioration of the locks.

Based on other historical sources reviewed, Data Gap Nos. 1 - 4 are not considered *significant*. However, based on historical use of the building and Site, Data Gap Nos. 5 and 6 are considered a *significant* Data Gap.

# 7.5 Other Noteworthy Issues

Other noteworthy issues identified during this Phase I ESA that, while not strictly a REC, HREC, CREC, or *de minimis* condition, in TRC's opinion warrant further discussion include the following:

• Multiple containers, totes and drums with unknown contents were observed within the community gardens. Additionally, an inoperable pineapple harvester, inoperable grader, multiple tires, car batteries, and debris piles containing green waste, trash and other debris were located on the Site. Although TRC did not visually identify any concerns associated with these containers, materials or debris piles, these materials should be removed and disposed of properly. Should any adversely impacted soils be identified following their removal or during future site development, the soils should be properly characterized and disposed of accordingly.

# 7.6 Limiting Conditions and Deviations

# 7.6.1 Accuracy and Completeness

The ASTM E 1527-13 standard recognizes inherent limitations for Phase I ESAs that apply to this report, including:

- Uncertainty Not Eliminated No Phase I ESA can wholly eliminate uncertainty regarding
  the potential for RECs in connection with a property. Data gaps identified during this
  Phase I ESA are listed in Section 7.4.
- Not Exhaustive A Phase I ESA is not an exhaustive investigation.
- Past Uses of the Property A review of standard historical sources at intervals less than 5 years is not required.

The Client is advised that the Phase I ESA conducted at the Site is a <a href="limited inquiry">limited inquiry</a> into a property's environmental status, cannot wholly eliminate uncertainty, and is not an exhaustive assessment to discover every potential source of environmental liability at the Site. Therefore, TRC does not make a statement i) of warranty or guarantee, express or implied for any specific use; ii) that the Site is free of RECs or environmental impairment; iii) that the Site is "clean"; or iv) that impairments, if any, are limited to those that were discovered while TRC was performing the Phase I ESA. This limiting statement is not meant to compromise the findings of this report; rather, it is meant as a statement of limitations within the ASTM standard and intended scope of this assessment. Specific limiting conditions identified during the Site reconnaissance are described in Section 5.1. Subsurface conditions may differ from the conditions implied by surface observations, and can be evaluated more thoroughly through intrusive techniques that are beyond the scope of this assessment. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes.

This report presents TRC's site reconnaissance observations, findings, and conclusions as they existed at the time of the Site reconnaissance. TRC makes no representation or warranty that the past or current operations at the property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. TRC makes no guarantees as to the accuracy or completeness of information obtained from others during the course of this Phase I ESA report. It is possible that information exists beyond the scope of this assessment, or that information was not provided to TRC. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. TRC is under no obligation to update this report to reflect such subsequent information. The findings presented in this report are based upon reasonably ascertainable information and observed Site conditions at the time of the assessment

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not assessed. Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were not fully disclosed to TRC during the assessment.



An independent data research company provided the government agency database referenced in this report. Information regarding surrounding area properties was requested for approximate minimum search distances and was assumed to be correct and complete unless obviously contradicted by TRC's observations or other credible referenced sources reviewed during the assessment.

TRC is not a professional title insurance or land surveyor firm and makes no guarantee, explicit or implied, that any land title records acquired or reviewed, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

#### 7.6.2 Warranties and Representations

This report does not warrant against: (1) operations or conditions which were not evident from visual observations or historical information provided; (2) conditions which could only be determined by physical sampling or other intrusive investigation techniques; (3) locations other than the client-provided addresses and/or legal parcel description; or (4) information regarding off-site location(s) (with possible impact to the Site) not published in publicly available records.

# 7.6.3 Continued Validity/User Reliance

This report is presumed to be valid, in accordance with, and subject to, the limitations specified in the ASTM E 1527-13 standard, for a period of 180 days from completion, or until the Client obtains specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Client is notified by TRC that it has obtained specific information that may materially alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is presumed valid if completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction.

#### 7.6.4 Significant Assumptions

During this Phase I ESA, TRC relied on database information; interviews with Site representatives, regulatory officials, and other individuals having knowledge of Site operations; and information provided by the User as requested in our authorized Scope of Work. TRC has assumed that the information provided is true and accurate. Reliance on electronic database search reports is subject to the limitations set forth in those reports. TRC did not independently verify the information provided. TRC found no reason to question the validity of the information received unless explicitly noted elsewhere in this report. If other information is discovered and/or if previous reports exist that were not provided to TRC, our conclusions may not be valid.

# 8.0 REFERENCES

Table 8.1 - References Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Information Updated	Reference Source
Environmental Data Resources	May 16, 2016	N/A	EDR Inquiry Number: 4620578
Federal Emergency Management Agency	May 18, 2016	N/A	http://www.fema.gov/
Maui County Tax Assessor	May 18, 2016	N/A	http://www.mauipropertytax.com/
Hawaii Department of Health	June 7, 2016	June 17, 2016	http://health.hawaii.gov
Maui County Department of Environmental Management	June 8, 2016	June 14, 2016	http://www.co.maui.hi.us
Personal Interview with Mr. A.J. Vergara	June 1, 2016	June 23, 2016	Personal Interview
Personal Interview with Captain Preza, Lanai Fire Department	June 21, 2016	N/A	Personal Interview
Provided prior report: An Evaluation of the Old Lanai Electrical Plant for Lanai Company as discussed in Section 4.3	N/A	N/A	N/A
Provided prior Summary: Summary Data Figure for the Former Emulsion Plant Area, Lanai City, Lanai, Hawaii as discussed in Section 4.3	N/A	N/A	N/A



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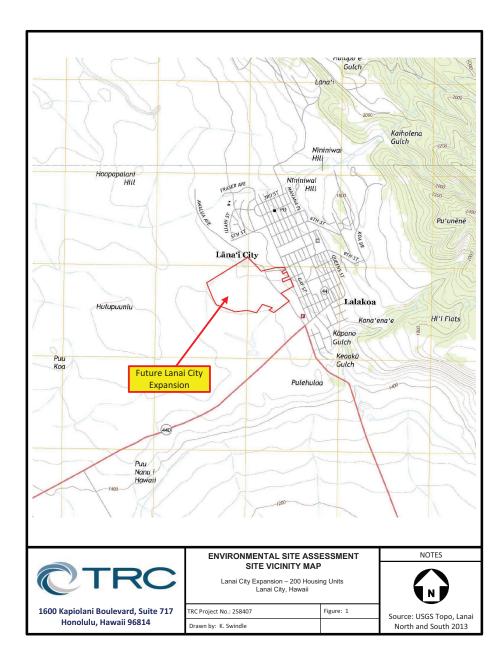


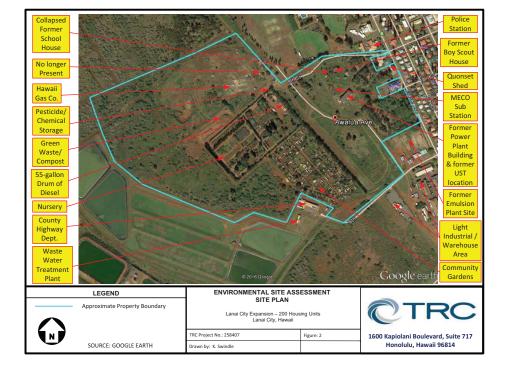
# 9.0 ADDITIONAL SERVICES

No additional services were performed during this Phase I ESA.

**FIGURES** 







APPENDIX A: DATABASE RADIUS REPORT Lanai City Expansion - 200 Housing Units Awalua Avenue Lanai City, HI 96763

Inquiry Number: 4620578.2s May 16, 2016

# The EDR Radius Map™ Report with GeoCheck®



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Physical Setting Source Records Searched.	PSGR-

Thank you for your business.
Please contact EDR at 1-800-352-0050 with any questions or comments.

# Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, no. It cannot be concluded from this Report that overage information for the target and surrounding properties does not exist from other coses, no. Variety of the concluded from this Report that overage information for the target and surrounding properties does not exist from other coses, no. Variety of the Control of the

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**EXECUTIVE SUMMARY** 

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### ADDRESS

AWALUA AVENUE LANAI CITY, HI 96763

#### COORDINATES

Latitude (North): 20.8211150 - 20° 49' 16.01" Longitude (West): 156.9232370 - 156° 55' 23.65"

Universal Tranverse Mercator: Zone 4 UTM X (Meters): 716130.6 UTM Y (Meters): 2303606.8

Elevation: 1545 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5946085 LANAI SOUTH, HI

Version Date: 2013

Northeast Map: 5945823 LANAI NORTH, HI

Version Date: 2013

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#### MAPPED SITES SUMMARY

# Target Property Address: AWALUA AVENUE LANAI CITY, HI 96763

#### Click on Map ID to see full detail.

DIRECTION 182, 0.034, NE 298, 0.056, NE
208 0.056 NE
190, 0.030, NL
377, 0.071, ESE
438, 0.083, ESE
752, 0.142, North
752, 0.142, North
1020, 0.193, ENE
1201, 0.227, East
1201, 0.227, East
1201, 0.227, East
1295, 0.245, East
1295, 0.245, East
1295, 0.245, East
1522, 0.288, NNE
2622, 0.497, NNE
43 75 75 10 12 12 12

# **EXECUTIVE SUMMARY**

# TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

# DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

# STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

#### Federal Delisted NPL site list

Delisted NPL	National Prio	rity List Deletions
--------------	---------------	---------------------

#### Federal CERCLIS list

FEDERAL FACILITY	Federal Facility Site Information listing
SEMS	Superfund Enterprise Management System

#### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE	Superfund	Enterprise	Management	System	Archive
--------------	-----------	------------	------------	--------	---------

# Federal RCRA CORRACTS facilities list

CORRACTS	Corrective Action	Report
----------	-------------------	--------

#### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF...... RCRA - Treatment, Storage and Disposal

# Federal RCRA generators list

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators

RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generator

# Federal institutional controls / engineering controls registries

LUCIS	Land Use Control Information System
US ENG CONTROLS	Engineering Controls Sites List

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#### **EXECUTIVE SUMMARY**

US INST CONTROL...... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF...... Permitted Landfills in the State of Hawaii

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST...... Underground Storage Tank Listing INDIAN UST...... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries ENG CONTROLS..... Engineering Control Sites

INST CONTROL...... Sites with Institutional Controls

State and tribal voluntary cleanup sites

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS...... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

CDL Clandestine Drug Lab Listing

Local Land Records

LIENS 2..... CERCLA Lien Information

#### **EXECUTIVE SUMMARY**

#### Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System SPILLS...... Release Notifications 

#### Other Ascertainable Records

FUDS..... Formerly Used Defense Sites 

TSCA...... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

SSTS..... Section 7 Tracking Systems ROD....... Records Of Decision

RMP..... Risk Management Plans

RAATS......RCRA Administrative Action Tracking System

PRP...... Potentially Responsible Parties 

ICIS...... Integrated Compliance Information System

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act) 

COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS...... FIFRA/TSCA Tracking System Administrative Case Listing DOT OPS...... Incident and Accident Data

FUSRAP..... Formerly Utilized Sites Remedial Action Program

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

FINDS......Facility Index System/Facility Registry System

UIC...... Underground Injection Wells Listing

ECHO. Enforcement & Compliance History Information
FUELS PROGRAM. EPA Fuels Program Registered Listing

# EDR HIGH RISK HISTORICAL RECORDS

# **EDR Exclusive Records**

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#### **EXECUTIVE SUMMARY**

<b>EDR</b>	Hist Auto	<b>EDR</b>	Exclusive	Historic	Gas	Stations
<b>EDR</b>	Hist Cleaner	<b>EDR</b>	Exclusive	Historic	Dry	Cleaners

#### EDR RECOVERED GOVERNMENT ARCHIVES

#### Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

#### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

#### State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

A review of the SHWS list, as provided by EDR, and dated 01/22/2016 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

LANAI HIGH AND ELEME MECO POLE-MOUNT TRAN	555 FRASER AVE	N 1/8 - 1/4 (0.142 mi.)	B5	12
	548 ILIMA ST	NNE 1/4 - 1/2 (0.288 mi.)	<b>14</b>	<b>20</b>
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page

# State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Active Leaking Underground Storage Tank Log Listing.

A review of the LUST list, as provided by EDR, and dated 01/13/2016 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

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# **EXECUTIVE SUMMARY**

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LANAI CENTRAL OFFICE Release ID: 960052 Facility Id: 9-400557 Facility Status: Site Cleanup Compl	423 NINTH ST eted (NFA)	NE 0 - 1/8 (0.034 mi.)	A1	8
OSHIRO ENTREPRISES I Release ID: 900130 Facility Id: 9-401388 Facility Status: Site Cleanup Compl	850 FRASER AVE eted (NFA)	NE 0 - 1/8 (0.056 mi.)	A2	9
DOLE LANAI PLANTATIO Release ID: 930036 Facility Id: 9-402426 Facility Status: Site Cleanup Compl	730 LANAI AVE / (DD eted (NFA)	E 1/8 - 1/4 (0.227 mi.)	C9	16
DOLE LANAI PLANTATIO Release ID: 900129 Facility Id: 9-402422 Facility Status: Site Cleanup Compl	730 LANAI AVE (KAUMA eted (NFA)	E 1/8 - 1/4 (0.227 mi.)	C10	17
DOLE LANAI PLANTATIO Release ID: 900013 Release ID: 030016 Facility Id: 9-400773 Facility Status: Site Cleanup Compl	750 LANAI AVE / (POW eted (NFA))	E 1/8 - 1/4 (0.245 mi.)	C11	18
FORMER LANAI RADAR S Release ID: 060036 Facility Id: 9-403819 Facility Status: Site Cleanup Compl	TMK 4-9-02 eted (NFA)	NNE 1/4 - 1/2 (0.497 mi.)	15	21

# State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtille I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 01/13/2016 has revealed that there are 8 UST sites within approximately  $\,0.25$  miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	ap ID Page	
LANAI CENTRAL OFFICE  Tank Status: Permanently Out of Use Tank Status: Currently In Use Facility Id: 9-400557 Date Closed: 03/29/1996	423 NINTH ST	,		8	
OSHIRO ENTREPRISES I Tank Status: Permanently Out of Use Facility Id: 9-401388 Date Closed: 06/24/1993	850 FRASER AVE	NE 0 - 1/8 (0.056 mi.)	A2	9	
DOLE LANAI PLANTATIO Tank Status: Permanently Out of Use Facility Id: 9-402423	LABOR YARD (LANAI AV	ENE 1/8 - 1/4 (0.193 mi.)	7	14	
DOLE LANAI PLANTATIO	730 LANAI AVE / (DD	E 1/8 - 1/4 (0.227 mi.)	C9	16	

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#### **EXECUTIVE SUMMARY**

Tank Status: Permanently Out of Use Facility Id: 9-402426 Date Closed: 09/03/1990				
DOLE LANAI PLANTATIO  Tank Status: Permanently Out of Use Facility Id: 9-402422	730 LANAI AVE (KAUMA	E 1/8 - 1/4 (0.227 mi.)	C10	17
DOLE LANAI PLANTATIO Tank Status: Permanently Out of Use Facility Id: 9-400773 Date Closed: 10/01/1989	750 LANAI AVE / (POW	E 1/8 - 1/4 (0.245 mi.)	C11	18
DOLE LANAI PLANTATIO Tank Status: Permanently Out of Use Facility Id: 9-402424	750 LANAI AVE / (EMU	E 1/8 - 1/4 (0.245 mi.)	C12	18
DOLE LANAI PLANTATIO Tank Status: Permanently Out of Use Facility Id: 9-402425 Date Closed: 10/30/1989	750 LANAI AVE / (SHO	E 1/8 - 1/4 (0.245 mi.)	C13	19

#### ADDITIONAL ENVIRONMENTAL RECORDS

#### Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2015 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LANAI CO INC	1233 FRASER AVE	ESE 0 - 1/8 (0.071 mi.)	3	9
OSHIRO SERVICE STATI	850 FRASER AVE	N 1/8 - 1/4 (0.142 mi.)	B6	13
DOLE PACKAGED FOODS	730 LANAI AVE	E 1/8 - 1/4 (0.227 mi.)	C8	15

US MINES: Mines Master Index File. The source of this database is the Dept. of Labor, Mine Safety and Health Administration.

A review of the US MINES list, as provided by EDR, and dated 02/09/2016 has revealed that there is 1 US MINES site within approximately  $0.25\,\mathrm{miles}$  of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CASTLE & COOKE RESOR		ESE 0 - 1/8 (0.083 mi.)	4	11

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# **EXECUTIVE SUMMARY**

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

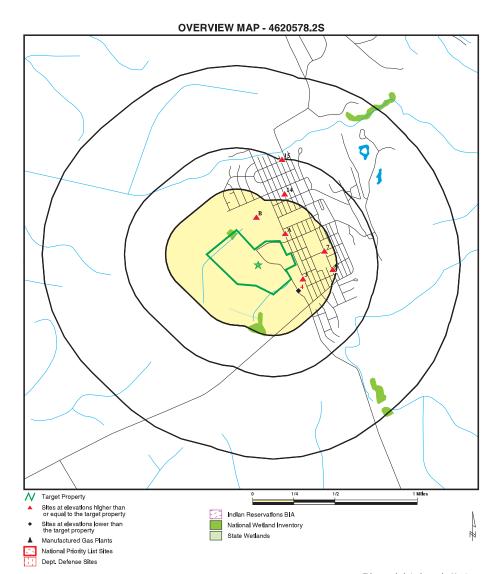
Site Name Database(s)

DOLE PLANTATION SEMS-ARCHIVE, RCRA-TSDF, RCRA NonGen / NLR

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LANAI LANDFILL
DOLE PLANTATION (PALAWAI & 5319 BA
SHWS

LANAI LDFL SEMS-ARCHIVE



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

 Target Property Sites at elevations higher than or equal to the target property Indian Reservations BIA Sites at elevations lower than National Wetland Inventory the target property State Wetlands Manufactured Gas Plants Sensitive Receptors National Priority List Sites Dept. Defense Sites This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

**DETAIL MAP - 4620578.2S** 

ADDRESS: Awalua Avenue	CLIENT: TRC CONTACT: Kacey Swindle INQUIRY #: 4620578.2s DATE: May 16, 2016 10:49 pm
	Conversit to 2016 FDR Inc. to 2015 TomTom Rel. 2015

NAAD	EINIDINICC	SHMMARY	1
MAP			1

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 0.001		0 0 0	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	te list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0	0	0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS	;						
SHWS	1.000		0	1	1	0	NR	2
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
LUST INDIAN LUST	0.500 0.500		2	3	1 0	NR NR	NR NR	6 0
State and tribal register	ed storage tan	k lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

# MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST INDIAN UST	0.250 0.250		2	6 0	NR NR	NR NR	NR NR	8
State and tribal institution control / engineering control		s						
ENG CONTROLS INST CONTROL	0.500 0.500		0	0 0	0	NR NR	NR NR	0
State and tribal voluntar	y cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0	0	0	NR NR	NR NR	0
State and tribal Brownfie	elds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
INDIAN ODI ODI DEBRIS REGION 9	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL CDL US CDL	0.001 0.001 0.001		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency I	Release Repo	rts						
HMIRS SPILLS SPILLS 90	0.001 0.001 0.001		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS	0.250 1.000 1.000 0.500 0.001 0.001 0.250 0.001 0.001		1 0 0 0 0 0 0	2 0 0 NR NR 0 NR	NR 0 0 0 NR NR NR NR	NR 0 0 NR NR NR NR NR	NR NR NR NR NR NR NR	3 0 0 0 0 0 0

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# MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SSTS ROD RMP RMA RAATS PRP PADS ICIS FITS MLTS COAL ASH EPA PCB TRANSFORMER RADINFO HIST FITS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES FINDS UXO DOCKET HWC AIRS DRYCLEANERS Financial Assurance UIC ECHO	0.001 1.000 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 1.000 0.001 1.000 0.001 0.001 1.000 0.001 1.000 0.001 1.000 0.001		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N O R R R R R R R R O R R R R R O R O R	N O R R R R R R R R O R R R R R O R O O R R R R R O R	N O N N N N N N N N N N N N N N N N N N	NR	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FUELS PROGRAM  EDR HIGH RISK HISTORIC	0.250		0	0	NR	NR	NR	0
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVER	NMENT ARCHIV	/ES						
Exclusive Recovered G	ovt. Archives							
RGA HWS RGA LF RGA LUST	0.001 0.001 0.001		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
- Totals		0	6	12	2	0	0	20

# MAP FINDINGS SUMMARY

	Search							
	Distance	Target						Total
Database	(Miles)	Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Plotted

# NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

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Map ID Direction			MAP FINDINGS			Map ID Direction			MAP FINDINGS
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number	Distance Elevation	Site		
A1 NE < 1/8 0.034 mi. 182 ft. Relative: Higher Actual: 1615 ft.	LANAI CENTRAL OFFICE 423 NINTH ST LANAI CITY, HI 96763 Site 1 of 2 in cluster A LUST: Facility ID: Facility Status: Facility Status Date: Release ID: Project Officer:  UST: Facility ID:	9-400557 Site Cleanup Com 08/02/1996 960052 Jose Ruiz	pleted (NFA) 9-400557	LUST UST Financial Assurance	U001236609 N/A	A2 NE < 1/8 0.056 mi. 298 ft. Relative: Higher Actual: 1618 ft.	OSHIRO ENTREPRISES II 850 FRASER AVE LANAI CITY, HI 96763 Site 2 of 2 in cluster A LUST: Facility ID: Facility Status: Facility Status Date: Release ID: Project Officer: UST: Facility ID:	9-401388 Site Cleanup Co 01/19/2001 900130 Shunsheng Fu	ompleted (NFA) 9-401388
	Owner: Owner Address: Owner City,St,Zip: Latitude: Longitude: Horizontal Reference I Horizontal Collection N		9-40057 Hawaiian Telcom P.O. Box 2200 Lanai City, 96763 96763 20.824197 -156.918913 NAD83 GPS				Owner: Owner Address: Owner City,St,Zip: Latitude: Longitude: Horizontal Reference Horizontal Collection I		9-401360 CASTLE & COOKE, INC P.O. BOX L Lanai City, 96763 96763 20.823763 -156.920451 NAD83 Address Matching
	Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		M-2 06/18/1996 Currently In Use Not reported 600 Diesel				Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		R-1 07/01/1952 Permanently Out of Use 06/24/1993 2000 Gasoline
	Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		R-1 05/08/1963 Permanently Out of Use 03/29/1996 285 Diesel				Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		R-2 07/01/1952 Permanently Out of Use 06/24/1993 2000 Gasoline
	Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		R-1 01/01/1963 Permanently Out of Use 03/29/1996 125 Diesel			3 ESE < 1/8 0.071 mi. 377 ft.	LANAI CO INC 1233 FRASER AVE LANAI CITY, HI 96763		
	HI Financial Assurance: Alt Facility ID: Tank Id: Tank Status: FRTYPE: Expiration Date: Alt Facility ID: Tank Id: Tank Status: FRTYPE: Expiration Date:	9-400557 M-2 Currently I Insurance 05/02/2018 9-400557 R-1 Permanen Insurance 05/02/2018	5 tly Out of Use			Relative: Higher Actual: 1557 ft.	RCRA NonGen / NLR: Date form received by Facility name: Facility address:  EPA ID: Mailing address:  Contact: Contact address:  Contact country: Contact telephone: Contact email: EPA Region:	LANAI C 1233 FR LANAI C HIROOO P O BO LANAI C PAT GA P O BO	IO INC IASER AVE ITY, HI 96763 155673 3 10 ITY, HI 96763 IBLE 310 ITY, HI 96763 IST, HI 96763

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EDR ID Number Database(s) EPA ID Number

LUST U003222163 UST N/A

RCRA NonGen / NLR 1001493016 FINDS HIR000055673 ECHO

Map ID MAP FINDINGS Direction

EDR ID Number Distance Site Database(s) EPA ID Number Elevation

LANAI CO INC (Continued) 1001493016

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator country:

LANIA CO INC Owner/operator name: P O BOX 310 Owner/operator address: LANAI CITY, HI 96763

Not reported (808) 565-3931

Owner/operator telephone: Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz, and radioactive): No Recycler of hazardous waste: Transporter of hazardous waste: Treater, storer or disposer of HW: Nο Underground injection activity: Nο On-site burner exemption: No Furnace exemption: No Used oil fuel burner: Nο Used oil processor: Nο User oil refiner Nο Used oil fuel marketer to burner Nο Used oil Specification marketer: No Used oil transfer facility: Nο Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110005730548

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

ECHO:

Envid: 1001493016 Registry ID: 110005730548

DFR URL: http://echo.epa.gov/detailed\_facility\_report?fid=110005730548 Distance Site Elevation CASTLE & COOKE RESORTS LLC < 1/8 MAUI (County), HI 0.083 mi. 438 ft. US MINES: Relative Mine ID: 5100247 Lower SIC code(s): 144200 000000 000000 000000 000000 000000 Entity name: KOMATSU PORTABLE PLANT 1542 ft. CASTLE & COOKE RESORTS LLC Company: Status: 20110429 Status date: Operation Class: non-Coal Mining Number of shops: Number of plants: Latitude: 20 49 08 156 55 10 Longitude: Violations Details: Violation Number: 6367346 Date Issued: 12/20/2004 Mine Status: Abandoned Status Date: 04/29/2011 Action Type: 104(a) Date Abated: 12/22/2004 Citation/Order: Citation Sig and Sub Designation: Proposed Penalty: Not reported Paid Penalty: Not reported Assessment Status code: Not reported Assess. Case Status code: Not reported Assessment Amount: Not reported 2004 Violation Number: 6367347 Date Issued: 12/20/2004 Mine Status: Abandoned Status Date: 04/29/2011 Action Type: 104(a) Date Abated: 12/22/2004 Citation/Order: Citation Sig and Sub Designation: Proposed Penalty: Not reported Paid Penalty: Not reported Assessment Status code: Assess. Case Status code: Not reported Assessment Amount: Not reported Year: Violation Number: 6435673 03/18/2008 Date Issued: Mine Status: Abandoned Status Date: 04/29/2011 Action Type: 104(a) 03/18/2008 Date Abated: Citation/Order: Citation Sig and Sub Designation:

MAP FINDINGS

EDR ID Number

EPA ID Number

US MINES 1011259757

N/A

Database(s)

Map ID

Direction

4 ESE

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100.00

Proposed Penalty:

Map ID Direction			MAP FINDINGS			
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number			
	CASTLE & COOKE RESORTS		1011259757			
	Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:					
	Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assessment Amount: Year: Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Paid Penalty: Paid Penalty: Assessment Status code: Assesss. Case Status code: Assessment Status code: Assessment Amount: Year:	100.00 100.00 Closed Proposed 100.00 2008  6444425 01/12/2009 Abandoned 04/29/2011 104(a) 01/12/2009 Citation N Not reported Not reported Not reported				
B5 North 1/8-1/4 0.142 mi.	LANAI HIGH AND ELEMENTAF 555 FRASER AVE LANAI CITY, HI	RY SCHOOL		SHWS	S110061631 N/A	
752 ft.	Site 1 of 2 in cluster B					
Relative: Higher	SHWS: Organization: Supplemental Location:		Not reported Lanai High and Elementary School			
Actual: 1589 ft.	Island: Environmental Interest: HID Number: Facility Registry Identifier: Lead Agency: Program: Project Manager: Hazard Priority: Potential Hazards And Cor Island: SDAR Environmental Inter HID Number: Facility Registry Identifier:		Lanai Lanai High and Elementary School Not reported Not reported HEER State John Peard NFA No Hazard Lanai High and Elementary School Not reported			

Not reported

HID Number: Facility Registry Identifier:

```
EPA ID Number
Flevation
                                                                                                Database(s)
           LANAI HIGH AND ELEMENTARY SCHOOL (Continued)
                                                                                                              S110061631
                Lead Agency:
                Potential Hazard And Controls:
                                                          No Hazard
                Priority:
                Assessment:
                                                          Response Not Necessary
                Response:
                                                          Not reported
                Nature of Contamination:
                                                          Not reported
                Nature of Residual Contamination:
                                                          Not reported
                Use Restrictions:
                                                          No Hazard Present For Unrestricted Residential Use
               Engineering Control:
                                                          Not reported
                Description of Restrictions:
                                                         Not reported
                Institutional Control:
                                                          Not reported
                Within Designated Areawide Contamination:
                                                         Not reported
                Site Closure Type:
                                                          No Action Letter
                Document Date:
                                                          07/14/2010
                Document Number:
                                                          2010-401-JP
                Document Subject:
                                                          No Action Letter upon Review of Site Investigation Report for Lanai
                                                         High and Elementary School, Lanai City, HI, TMK 2-4-9-014-002 (~8
                                                          acres)
                Project Manager:
                                                          John Peard
                Contact Information:
                                                          (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,
           OSHIRO SERVICE STATION
                                                                                        RCRA NonGen / NLR 1000860479
B6
North
           850 FRASER AVE
                                                                                                     FINDS HID984470153
1/8-1/4
           LANAI CITY, HI 96763
                                                                                                      ECHO
0.142 mi.
           Site 2 of 2 in cluster B
752 ft.
              RCRA NonGen / NLR:
Relative:
                Date form received by agency: 08/09/1993
Higher
                                            OSHIRO SERVICE STATION
                Facility name:
Actual:
1589 ft.
                Facility address:
                                            850 FRASER AVE
                                            LANAI CITY, HI 96763
                EPA ID:
                                            HID984470153
                Contact:
                                            JAMES E NUTI
                Contact address:
                                            P O BOX L
                                            LANAI CITY, HI 96763
                Contact country:
                Contact telephone:
                                            (808) 565-8252
                Contact email:
                                            Not reported
                EPA Region:
                                            09
               Land type:
                                            Private
                Classification:
                                            Non-Generator
                                            Handler: Non-Generators do not presently generate hazardous waste
                Description:
             Owner/Operator Summary:
                                            CASTLE AND COOKE INC
               Owner/operator name:
                Owner/operator address:
                                           P O BOX L
                                            LANAI CITY, HI 96763
               Owner/operator country:
                                            Not reported
                                            (808) 565-8200
               Owner/operator telephone:
                Legal status:
                                            Private
                Owner/Operator Type:
                                            Owner
                Owner/Op start date:
                                            Not reported
                Owner/Op end date:
                                            Not reported
```

MAP FINDINGS

EDR ID Number

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Map ID

Direction Distance Map ID MAP FINDINGS Direction EDR ID Number Distance Site Database(s) EPA ID Number Elevation OSHIRO SERVICE STATION (Continued) 1000860479 Handler Activities Summary: U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: Transporter of hazardous waste: Treater, storer or disposer of HW: No Underground injection activity: Nο On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: Nο Used oil transporter: No Violation Status: No violations found Evaluation Action Summary: Evaluation date: 02/09/1996 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State FINDS: 110005729015 Registry ID: Environmental Interest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. ECHO: 1000860479 Envid Registry ID: 110005729015 http://echo.epa.gov/detailed\_facility\_report?fid=110005729015 DFR URL: DOLE LANAI PLANTATION UST U001236614 ENE LABOR YARD (LANAI AVE-11TH ST) N/A 1/8-1/4 LANAI CITY, HI 96763 0.193 mi 1020 ft. UST: Relative: Facility ID: 9-402423

DOLE FOOD COMPANY HAWAII, INC

1116 WHITMORE AVE

Lanai City, 96763 96763

Not reported

Not reported

Higher

Actual:

1595 ft

Owner:

Longitude:

Owner Address:

Owner City,St,Zip: Latitude:

Database(s) EPA ID Number Elevation DOLE LANAI PLANTATION (Continued) U001236614 Horizontal Reference Datum Name: Not reported Horizontal Collection Method Name: Not reported Tank ID: R-L5 Date Installed: 05/07/2030 Tank Status: Permanently Out of Use Date Closed: Not reported Tank Capacity: Not reported Substance: Used Oil DOLE PACKAGED FOODS CO RCRA NonGen / NLR 1000197950 C8 730 LANAI AVE HID981424203 Fast 1/8-1/4 LANAI CITY, HI 96763 0.227 mi. 1201 ft. Site 1 of 6 in cluster C Relative RCRA NonGen / NLR: Date form received by agency: 12/05/1996 Higher Facility name: DOLE PACKAGED FOODS CO Actual: Facility address: 730 LANAI AVE 1595 ft. LANAI CITY, HI 96763 EPA ID: HID981424203 Mailing address: 650 IWILEI RD HONOLULU, HI 96817 Contact: Not reported Contact address: Not reported Not reported Contact country: Not reported Contact telephone: Not reported Contact email: Not reported EPA Region: Land type: Facility is not located on Indian land. Additional information is not known. Classification: Non-Generator Handler: Non-Generators do not presently generate hazardous waste Description: Owner/Operator Summary: CASTLE & COOKE INC Owner/operator name: NOT REQUIRED NOT REQUIRED, ME 99999 Owner/operator address: Owner/operator country: Not reported Owner/operator telephone: (415) 555-1212 Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported NOT REQUIRED Owner/operator name: Owner/operator address: NOT REQUIRED NOT REQUIRED, ME 99999 Owner/operator country: Not reported Owner/operator telephone: (415) 555-1212 Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

MAP FINDINGS

EDR ID Number

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Map ID

Direction

Distance

Map ID Direction			MAP FINDINGS			
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number			
	DOLE PACKAGED FOODS	CO (Continued)			1000197950	
	Classification: Not a g Violation Status: No viol  Evaluation Action Summary: Evaluation date: 02/09/		CKAGED FOODS CO erator, verified  ons found  6  NCE EVALUATION INSPECTION ON-SITE			
C9 East 1/8-1/4	Evaluation lead agency  DOLE LANAI PLANTATION 730 LANAI AVE / (DD FARM LANAI CITY, HI 96763	LUST UST	U001236617 N/A			
0.227 mi. 1201 ft. Relative: Higher Actual: 1595 ft.	Facility Status: Facility Status Date:	9-402426 Site Cleanup Com 07/03/2001 930036	hpleted (NFA)			
	Project Officer:  UST: Facility ID: Owner: Owner Address: Owner City, St. Zip: Latitude: Longitude: Longitude: Horizontal Reference D Horizontal Collection M: Tank ID: Date Installed: Tank Status:		9-402426 DOLE FOOD COMPANY HAWAII, INC 1116 WHITMORE AVE Lanai City, 96763 96763 20.813530 -156.916726 NAD83 Map R-L9 05/07/2041 Permanently Out of Use			

```
Map ID
Direction
                                                                                                                          EDR ID Number
EPA ID Number
Distance
Elevation
                                                                                                           Database(s)
            DOLE LANAI PLANTATION (Continued)
                                                                                                                          U001236617
                  Date Closed:
                                                             09/03/1990
                  Tank Capacity:
                                                             1400
                  Substance:
                                                             Hazardous Substance
            DOLE LANAI PLANTATION
730 LANAI AVE (KAUMALAPAU HWY FIELD 5520)
                                                                                                                  LUST U001236613
East
                                                                                                                   UST N/A
1/8-1/4
            LANAI CITY, HI 96763
0.227 mi.
1201 ft.
            Site 3 of 6 in cluster C
               LUST:
Relative:
                                         9-402422
                  Facility ID:
Higher
                  Facility Status:
                                         Site Cleanup Completed (NFA)
Actual:
1595 ft.
                  Facility Status Date:
                                         08/28/2001
                  Release ID:
                                         900129
                  Project Officer:
                                         Shaobin Li
               UST:
                 Facility ID:
Owner:
                                                             9-402422
                                                            DOLE FOOD COMPANY HAWAII, INC
1116 WHITMORE AVE
                  Owner Address:
                                                            Lanai City, 96763 96763
20.826150
-156.918532
                  Owner City,St,Zip:
                  Latitude:
                  Longitude:
                 Horizontal Reference Datum Name:
Horizontal Collection Method Name:
                                                             NAD83
                                                             Address Matching
                 Tank ID:
Date Installed:
Tank Status:
                                                            R-L2
05/07/1969
Permanently Out of Use
Not reported
10390
                  Date Closed:
                  Tank Capacity:
                  Substance:
                                                             Diesel
                  Tank ID:
                                                             R-L3
                  Date Installed:
                                                             05/07/1969
                  Tank Status:
                                                             Permanently Out of Use
                                                            Not reported
7050
                  Date Closed:
                  Tank Capacity:
                  Substance:
                                                             Gasoline
                                                            R-L4
05/07/2049
                  Tank ID:
                  Date Installed:
                  Tank Status:
                                                             Permanently Out of Use
                  Date Closed:
                                                             Not reported
                                                             11280
                  Tank Capacity:
                  Substance:
                                                             Gasoline
```

MAP FINDINGS

TC4620578.2s Page 16 TC4620578.2s Page 17

Map ID Direction Distance Elevation	Site		MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number	Di Di	ap ID irection istance levation	Site		MAP FINDINGS
C11 East 1/8-1/4 0.245 mi. 1295 ft. Relative: Higher Actual:	Facility Status:	PLANT)  9-400773 Site Cleanup Com	npleted (NFA)	LUST UST	U001236610 N/A			DOLE LANAI PLANTATION (Cont Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:	inued)	R-L7A 05/08/2047 Permanently Out of Use Not reported 10000 Diesel
1590 ft.	Release ID: Project Officer: Facility ID: Facility Status: Facility Status Date: Release ID:	09/15/2006 900013 Darren Park 9-400773 Site Cleanup Com 02/12/2007 030016 Darren Park	npleted (NFA)					Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:		R-L7B 05/08/2047 Permanently Out of Use Not reported 10000 Diesel
	UST: Facility ID: Owner: Owner Address: Owner City,St,Zip: Latitude: Longitude: Horizontal Reference D Horizontal Collection M  Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:  Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:	oatum Name:	9-400773 DOLE FOOD COMPANY HAWAII, INC 1116 WHITMORE AVE Lanai City, 98763 96763 20.825514 -136.918254 NAD83 Address Matching L6 05/07/2046 Permanently Out of Use Not reported 5000 Diesel  R-L1 05/07/2046 Permanently Out of Use 10/01/1989 25000 Diesel			Es 1/2 12 R: Hi	13 ast 8-1/4 245 mi. 295 ft. elative: igher ctual: 590 ft.	OLE LANAI PLANTATION 750 LANAI AVE / (SHOP- LANAI A LANAI CITY, HI 96763  Site 6 of 6 in cluster C UST: Facility ID: Owner: Owner Address: Owner City, St, Zip: Latitude: Longitude: Horizontal Reference Datum N Horizontal Collection Method N Tank ID: Date Installed: Tank Status: Date Closed: Tank Capacity: Substance:  Tank ID: Date Installed:	Name:	9-402425 DOLE FOOD COMPANY HAWAII, INC 1116 WHITMORE AVE Lanai City, 96763 96763 Not reported Not reported Not reported Not reported Not reported R-L8-1 05/07/2036 Permanently Out of Use 10/30/1989 1000 Diesel  R-L8-2 Not reported
C12 East 1/8-1/4 0.245 mi. 1295 ft. Relative: Higher	DOLE LANAI PLANTATION 750 LANAI AVE / (EMULSIC LANAI CITY, HI 96763 Site 5 of 6 in cluster C UST: Facility ID:		SER AVE) 9-402424	UST	U001236615 N/A			Tank Status: Date Closed: Tank Capacity: Substance:  Tank ID: Date Installed: Tank Status:		Permanently Out of Use 10/30/1989 1000 Not Listed  R-L8-3 Not reported Permanently Out of Use
Actual: 1590 ft.	Owner: Owner Address: Owner City,St,Zip: Latitude: Longitude: Horizontal Reference D Horizontal Collection M		DOLE FOOD COMPANY HAWAII, INC 1116 WHITMORE AVE Lanai City, 98763 96763 Not reported Not reported Not reported Not reported Not reported					Date Closed: Tank Capacity: Substance:  Tank ID: Date Installed: Tank Status:		10/30/1989 1000 Not Listed R-L8-4 Not reported Permanently Out of Use

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Database(s) EDR ID Number EPA ID Number

U001236615

UST U001236616 N/A

Map ID Direction		N	MAP FINDINGS				
Distance Elevation	Site			D	Oatabase(s)	EDR ID Number EPA ID Number	
	DOLE LANAI PLANTATION (Con Date Closed: Tank Capacity: Substance:	10	0/30/1989 000 ot Listed			U001236616	
14 NNE 1/4-1/2 0.288 mi. 1522 ft.	MECO POLE-MOUNT TRANSFOR 548 ILIMA ST LANAI CITY, HI 96763	MER NO. 0012			SHWS SPILLS	S113230495 N/A	
Relative: Higher Actual: 1623 ft.	SHWS: Organization: Supplemental Location: Island: Environmental Interest: HID Number: Facility Registry Identifier: Lead Agency: Program: Project Manager: Hazard Priority: Potential Hazards And Controls: Island: SDAR Environmental Interest Name: HID Number: Facility Registry Identifier: Lead Agency: Potential Hazard And Controls: Island: SDAR Environmental Interest Name: HID Number: Facility Registry Identifier: Lead Agency: Potential Hazard And Controls: Priority: Assessment: Response: Nature of Contamination: Nature of Contamination: Nature of Residual Contamination: Use Restrictions: Institutional Control: Within Designated Areavide Contamination: Site Closure Type: Document Date: Document Date: Document Subject:  Project Manager: Contact Information: HI SPILLS: Island: Supplemental Loc. Text: Case Number: Case Number: Not reported Facility Registry Id: Not reported HEER EP&R Note		ount Transformer No. 0012	. 0012 kg), PCB ( d Resident ted Reside MECO Ti 43 and Pa	ential Use ential Use ransformer N ad-Mount Trai		

Direction EDR ID Number EPA ID Number Distance Flevation Database(s) MECO POLE-MOUNT TRANSFORMER NO. 0012 (Continued) S113230495 Less Or Greater Than: Not reported Numerical Quantity: 11 Units: Gallons Activity Type: Response Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Refer to SDAR File Under: MECO-Kahului Baseyard Not reported Not reported Latitude: Longitude: 15 FORMER LANAI RADAR STATION LUST U004109511 NNE TMK 4-9-02 UST N/A 1/4-1/2 ZIPCODE UNKNOWN, XX 99999 0.497 mi. 2622 ft. LUST: Relative: Facility ID: 9-403819 Higher Facility Status: Site Cleanup Completed (NFA) Actual: Facility Status Date: 03/31/2008 1659 ft. Release ID: 060036 Project Officer: Josh Nagashima UST: Facility ID: 9-403819 Dept of Army - USA Corps of Engineer
Program & Project Management DivBldg 230 rom 306
ZipCode Unknown, 99999 99999 Owner: Owner Address: Owner City,St,Zip: 20.830493 Latitude: -156.920756 Longitude: Horizontal Reference Datum Name: NAD83 Horizontal Collection Method Name: Zip Code Tank ID: R-M-1 Date Installed: Tank Status: Not reported Permanently Out of Use 08/29/2006 Date Closed: Tank Capacity: 4500 Substance: Other R-M-1 Tank ID: Date Installed: Not reported Permanently Out of Use 08/29/2006 Tank Status: Date Closed: Tank Capacity: 4500 Substance: Other

MAP FINDINGS

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Map ID

Count: 4 records ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LANAI LANAI CITY		LANAI LANDFILL	KAUMALAPAU HWY	96763	
LANAI CITY	1000198027	DOLE PLANTATION	PALAWAI & 5319 BASINS		SEMS-ARCHIVE, RCRA-TSDF, RCRA NonGen / NLR
LANAI CITY	1006820213	DOLE PLANTATION (PALAWAI & 5319 BA	PALAWAI ST	96763	SHWS

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# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016 Source: EPA Date Data Arrived at EDR: 04/05/2016 Telephone: N/A

Last EDR Contact: 04/05/2016

Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10

Next Scheduled EDR Contact: 04/18/2016

Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9 Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10 Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016 Source: EPA Date Data Arrived at EDR: 04/05/2016 Telephone: N/A

Date Made Active in Reports: 04/15/2016 Last EDR Contact: 04/05/2016 Number of Days to Update: 10 Next Scheduled EDR Contact: 04/18/2016

Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Source: EPA Date Data Arrived at EDR: 02/02/1994 Telephone: 202-564-4267 Last EDR Contact: 08/15/2011 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

TC4620578.2s Page GR-1

#### Federal Delisted NPL site list

#### Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016 Source: EPA
Date Data Arrived at EDR: 04/05/2016 Telephone: N/A

Number of Days to Update: 10 Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

#### Federal CERCLIS list

#### FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015

Date Data Arrived at EDR: 04/08/2015

Date Made Active in Reports: 06/11/2015

Number of Davs to Undate: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704

Last EDR Contact: 04/08/2016

Next Scheduled EDR Contact: 07/18/2016

Data Release Frequency: Varies

#### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 10 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 04/05/2016

Next Scheduled EDR Contact: 08/01/2016 Data Release Frequency: Quarterly

#### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Source: EPA

Source: EPA

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/05/2016 Date Made Active in Reports: 04/15/2016

Telephone: 800-424-9346

Last EDR Contact: 04/05/2016 Next Scheduled EDR Contact: 08/01/2016 Data Release Frequency: Quarterly

# Number of Days to Update: 10 Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016

Telephone: 800-424-9346 Last EDR Contact: 03/30/2016

Number of Days to Update: 34

Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Quarterly

#### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895

Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Quarterly

#### Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 03/30/2016

D Update: 34 Next Scheduled EDR Contact: 07/11/2016 Data Release Frequency: Quarterly

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#### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Quarterly

#### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016

Days to opulate: 34 Next Scrieduled EDR Contact: 0

#### Federal institutional controls / engineering controls registries

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015 Number of Days to Update: 13 Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 02/16/2016

Next Scheduled EDR Contact: 05/30/2016 Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health

Date of Government Version: 09/10/2015 Date Data Arrived at EDR: 09/11/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 53 Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 02/29/2016 Next Scheduled EDR Contact: 06/13/2016

Data Release Frequency: Varies

## US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015 Date Data Arrived at EDR: 09/11/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 53 Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 02/29/2016

Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Varies

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### Federal ERNS list

#### ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

Date of Government Version: 06/22/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015 Number of Days to Update: 82

Telephone: 202-267-2180 Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016

Source: National Response Center, United States Coast Guard

Data Release Frequency: Annually

#### State- and tribal - equivalent CERCLIS

SHWS: Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 01/22/2016 Date Data Arrived at EDR: 01/26/2016 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 36 Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 02/26/2016 Next Scheduled EDR Contact: 06/06/2016 Data Release Frequency: Semi-Annually

#### State and tribal landfill and/or solid waste disposal site lists

#### SWF/LF: Permitted Landfills in the State of Hawaii

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal

Date of Government Version: 09/17/2012 Date Data Arrived at EDR: 04/03/2013 Date Made Active in Reports: 05/10/2013 Source: Department of Health Telephone: 808-586-4245 Last EDR Contact: 04/01/2016

Number of Days to Update: 37 Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

#### State and tribal leaking storage tank lists

#### LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/13/2016 Date Data Arrived at EDR: 01/15/2016 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 47 Source: Department of Health Telephone: 808-586-4228 Last EDR Contact: 03/04/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015 Date Data Arrived at EDR: 01/08/2015 Date Made Active in Reports: 02/09/2015 Number of Days to Update: 32 Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 04/27/2016 Next Scheduled EDR Contact: 08/08/2016

Data Release Frequency: Quarterly

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INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015 Date Data Arrived at EDR: 10/23/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 118

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 04/27/2016

Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/28/2015 Date Made Active in Reports: 06/22/2015 Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/29/2016 Next Scheduled EDR Contact: 08/08/2016

Number of Days to Update: 55 Next Scheduled EDR Contact: 08
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

Date of Government Version: 08/20/2015 Date Data Arrived at EDR: 10/30/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 111 Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 04/29/2016 Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015 Date Data Arrived at EDR: 12/01/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 34 Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2/016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land

Date of Government Version: 10/27/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 67 Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 04/29/2016 Next Scheduled EDR Contact: 08/08/2016

Source: EPA Region 5

Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 52

Telephone: 312-886-7439
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 04/29/2/016 Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Quarterly

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks

Date of Government Version: 01/01/2010 Source: FEMA
Date Data Arrived at EDR: 02/16/2010 Telephone: 202-646-5797

Date Made Active in Reports: 04/12/2010 Last EDR Contact: 04/11/2016
Number of Days to Update: 55 Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/13/2016 Date Data Arrived at EDR: 01/15/2016 Date Made Active in Reports: 03/02/2016 Source: Department of Health Telephone: 808-586-4228 Last EDR Contact: 03/04/2016

Number of Days to Update: 47 Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 52 Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 04/27/2016 Next Scheduled EDR Contact: 08/08/2016

Data Release Frequency: Varies

Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014 Date Data Arrived at EDR: 02/13/2015 Date Made Active in Reports: 03/13/2015 Number of Days to Update: 28 Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015 Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/29/2016

Number of Days to Update: 65 Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

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#### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/13/2015

Date Data Arrived at EDR: 10/23/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 118

Source: EPA Region 8

Telephone: 303-312-6137

Last EDR Contact: 04/29/2016

Next Scheduled EDR Contact: 08/08/2016

Data Release Frequency: Quarterly

#### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations)

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Number of Days to Update: 67
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

#### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016 Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016 Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016 Number of Days to Update: 41
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

#### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/20/2015 Source: EPA Region 6
Date Data Arrived at EDR: 10/30/2015 Telephone: 214-665-7591
Last EDR Contact: 08/08/2016
Number of Days to Update: 111
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

#### State and tribal institutional control / engineering control registries

#### ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

#### INST CONTROL: Sites with Institutional Controls

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 01/22/2016 Date Data Arrived at EDR: 01/26/2016 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 36 Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 02/26/2016 Next Scheduled EDR Contact: 06/06/2016

Data Release Frequency: Varies

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### State and tribal voluntary cleanup sites

#### INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Date Data Arrived at EDR: 04/22/2008

Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7

Telephone: 913-551-7365

Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact:

Next Scheduled EDR Contact: 04/20/2009

Data Release Frequency: Varies

#### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

#### VCP: Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 01/22/2016 Source: Department of Health
Date Data Arrived at EDR: 01/26/2016 Telephone: 808-586-4249
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36 Next Scheduled EDR Contact: 06/06/2016

of Days to Update: 36 Next Scheduled EDR Contact: 06/06/.
Data Release Frequency: Varies

#### State and tribal Brownfields sites

#### BROWNFIELDS: Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant

Date of Government Version: 01/22/2016 Date Data Arrived at EDR: 01/26/2016 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 36

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 02/26/2016 Next Scheduled EDR Contact: 06/06/2016

Data Release Frequency: Varies

## ADDITIONAL ENVIRONMENTAL RECORDS

## Local Brownfield lists

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as a reas served by Brownfields grant programs.

Date of Government Version: 12/22/2015 Date Data Arrived at EDR: 12/23/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 57 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 03/22/2016 Next Scheduled EDR Contact: 07/04/2016 Data Release Frequency: Semi-Annually

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#### Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008 Number of Days to Update: 52

Source: Environmental Protection Agency Telephone: 703-308-8245

Last EDR Contact: 04/27/2016 Next Scheduled EDR Contact: 08/15/2016 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria

Date of Government Version: 06/30/1985

Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004 Number of Days to Update: 39

Source: Environmental Protection Agency Telephone: 800-424-9346 Last EDR Contact: 06/09/2004

Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 04/21/2016

Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: No Update Planned

#### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory

Date of Government Version: 09/17/2015 Date Data Arrived at EDR: 12/04/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Undate: 76

Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 03/01/2016 Next Scheduled EDR Contact: 06/13/2016

Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010 Date Data Arrived at EDR: 09/10/2010 Date Made Active in Reports: 10/22/2010 Number of Days to Update: 42

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 02/29/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not quarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/17/2015 Date Data Arrived at EDR: 12/04/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 76

Telephone: 202-307-1000 Last EDR Contact: 03/01/2016 Next Scheduled EDR Contact: 06/13/2016

Data Release Frequency: Quarterly

Source: Drug Enforcement Administration

#### Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014 Number of Days to Update: 37

Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 04/26/2016

Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015 Source: U.S. Department of Transportation Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015 Number of Days to Update: 68

Telephone: 202-366-4555 Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Annually

SPILLS: Release Notifications

Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988

Date of Government Version: 01/14/2016 Date Data Arrived at EDR: 02/24/2016 Date Made Active in Reports: 04/06/2016 Number of Days to Update: 42

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 02/24/2016 Next Scheduled EDR Contact: 06/06/2016

Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90. Source: FirstSearch

Date of Government Version: 03/10/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/11/2013 Number of Days to Update: 39

Telephone: N/A Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous

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Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 34

Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 03/30/2016 Next Scheduled EDR Contact: 07/11/2016 Data Release Frequency: Varies

#### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015 Number of Days to Update: 97

Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 03/11/2016 Next Scheduled EDR Contact: 06/20/2016 Data Release Frequency: Varies

#### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 62

Source: USGS Telephone: 888-275-8747 Last EDR Contact: 04/15/2016 Next Scheduled EDR Contact: 07/25/2016 Data Release Frequency: Semi-Annually

#### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States, Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land. Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 04/15/2016 Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: N/A

#### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011 Number of Days to Update: 54

Source: Environmental Protection Agency Telephone: 615-532-8599 Last FDR Contact: 02/19/2016 Next Scheduled EDR Contact: 05/30/2016 Data Release Frequency: Varies

#### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015 Date Data Arrived at EDR: 09/03/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 61

Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 02/16/2016 Next Scheduled EDR Contact: 05/30/2016 Data Release Frequency: Quarterly

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at FDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88

Source: Environmental Protection Agen Telephone: 617-520-3000 Last EDR Contact: 05/09/2016 Next Scheduled EDR Contact: 08/22/2016 Data Release Frequency: Quarterly

#### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015 Number of Days to Update: 6

Source: Environmental Protection Agency Telephone: 703-308-4044 Last FDR Contact: 05/12/2016 Next Scheduled EDR Contact: 08/22/2016 Data Release Frequency: Varies

#### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Source: EPA

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015

Telephone: 202-260-5521 Date Made Active in Reports: 01/29/2015 Last EDR Contact: 03/24/2016

Number of Days to Update: 14 Next Scheduled EDR Contact: 07/04/2016 Data Release Frequency: Every 4 Years

#### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 133

Source: EPA Telephone: 202-566-0250 Last EDR Contact: 02/24/2016 Next Scheduled EDR Contact: 06/06/2016 Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011 Number of Days to Update: 77

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 04/25/2016 Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Annually

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#### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup. Source: EPA

Date of Government Version: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014 Number of Days to Update: 74

Telephone: 703-416-0223 Last EDR Contact: 03/08/2016 Next Scheduled EDR Contact: 06/20/2016 Data Release Frequency: Annually

#### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015 Date Data Arrived at EDR: 08/26/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 69

Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 04/25/2016 Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Varies

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35

Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

#### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014 Number of Days to Update: 3

Source: EPA Telephone: 202-564-6023 Last EDR Contact: 05/12/2016 Next Scheduled EDR Contact: 08/22/2016 Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 10/15/2014 Date Made Active in Reports: 11/17/2014 Number of Days to Update: 33

Source: EPA Telephone: 202-566-0500 Last EDR Contact: 04/12/2016 Next Scheduled EDR Contact: 07/25/2016 Data Release Frequency: Annually

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES)

Date of Government Version: 01/23/2015

Date Data Arrived at EDR: 02/06/2015 Date Made Active in Reports: 03/09/2015 Number of Days to Update: 31

Source: Environmental Protection Agency Telephone: 202-564-5088

Last EDR Contact: 04/08/2016 Next Scheduled FDR Contact: 07/25/2016 Data Release Frequency: Quarterly

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Telephone: 202-566-1667

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Last EDR Contact: 02/22/2016 Next Scheduled EDR Contact: 06/06/2016 Number of Days to Update: 25

Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009

Source: EPA Date Data Arrived at EDR: 04/16/2009 Telephone: 202-566-1667 Date Made Active in Reports: 05/11/2009 Last EDR Contact: 02/22/2016 Number of Days to Update: 25

Next Scheduled EDR Contact: 06/06/2016 Data Release Frequency: Quarterly

#### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 03/18/2016 Date Made Active in Reports: 04/15/2016 Source: Nuclear Regulatory Commission Telephone: 301-415-7169 Last EDR Contact: 05/06/2016

Next Scheduled EDR Contact: 08/22/2016 Number of Days to Update: 28 Data Release Frequency: Quarterly

#### COAL ASH DOF: Steam-Flectric Plant Operation Data

A listing of power plants that store ash in surface ponds

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009 Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 04/15/2016

Next Scheduled EDR Contact: 07/25/2016 Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Telephone: N/A Last EDR Contact: 03/11/2016

Source: Environmental Protection Agency

Number of Days to Update: 40 Next Scheduled EDR Contact: 06/20/2016 Data Release Frequency: Varies

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## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Source: Environmental Protection Agency Date Data Arrived at EDR: 10/19/2011 Telephone: 202-566-0517 Last EDR Contact: 04/26/2016 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83 Next Scheduled EDR Contact: 08/08/2016 Data Release Frequency: Varies

#### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S.

Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015 Source: Environmental Protection Agency Date Data Arrived at EDR: 07/09/2015 Telephone: 202-343-9775 Date Made Active in Reports: 09/16/2015 Last EDR Contact: 04/08/2016 Next Scheduled EDR Contact: 07/18/2016 Number of Days to Update: 69 Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated

Date of Government Version: 10/19/2006 Source: Environmental Protection Agency Date Data Arrived at EDR: 03/01/2007 Telephone: 202-564-2501 Date Made Active in Reports: 04/10/2007 Last EDR Contact: 12/17/2007

Number of Days to Update: 40 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

#### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Source: Environmental Protection Agency Telephone: 202-564-2501 Date Data Arrived at EDR: 03/01/2007 Last EDR Contact: 12/17/2008 Date Made Active in Reports: 04/10/2007 Next Scheduled EDR Contact: 03/17/2008 Number of Days to Update: 40 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Source: Department of Transporation, Office of Pipeline Safety Date Data Arrived at EDR: 08/07/2012 Telephone: 202-366-4595 Date Made Active in Reports: 09/18/2012 Last EDR Contact: 05/04/2016

Number of Days to Update: 42 Next Scheduled EDR Contact: 08/15/2016 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 04/17/2015

Telephone: Varies Date Made Active in Reports: 06/02/2015 Last EDR Contact: 03/24/2016

Number of Days to Update: 46 Next Scheduled EDR Contact: 07/11/2016

Data Release Frequency: Varies

Source: Department of Justice, Consent Decree Library

#### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013 Source: EPA/NTIS Telephone: 800-424-9346 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015 Last EDR Contact: 02/26/2016 Number of Days to Update: 218 Next Scheduled EDR Contact: 06/06/2016 Data Release Frequency: Biennially

#### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres

Date of Government Version: 12/31/2005 Source: USGS Date Data Arrived at EDR: 12/08/2006 Telephone: 202-208-3710 Date Made Active in Reports: 01/11/2007 Last EDR Contact: 04/15/2016

Next Scheduled EDR Contact: 07/25/2016 Number of Days to Update: 34 Data Release Frequency: Semi-Annually

#### FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015 Source: Department of Energy Date Data Arrived at EDR: 11/24/2015 Telephone: 202-586-3559 Date Made Active in Reports: 02/18/2016 Last EDR Contact: 05/09/2016 Number of Days to Update: 86 Next Scheduled EDR Contact: 08/22/2016 Data Release Frequency: Varies

#### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized

Date of Government Version: 09/14/2010 Source: Department of Energy Date Data Arrived at EDR: 10/07/2011 Telephone: 505-845-0011 Last EDR Contact: 03/28/2016 Date Made Active in Reports: 03/01/2012 Next Scheduled EDR Contact: 06/06/2016 Number of Days to Update: 146 Data Release Frequency: Varies

## LFAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014 Source: Environmental Protection Agency Date Data Arrived at EDR: 11/26/2014 Telephone: 703-603-8787 Date Made Active in Reports: 01/29/2015 Last EDR Contact: 04/07/2016 Number of Days to Update: 64 Next Scheduled EDR Contact: 07/18/2016 Data Release Frequency: Varies

#### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

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Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010 Number of Days to Update: 36

Source: American Journal of Public Health Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 69

Source: EPA Telephone: 202-564-2496 Last EDR Contact: 03/24/2016 Next Scheduled EDR Contact: 07/11/2016 Data Release Frequency: Annually

#### US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/20/2015

Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016 Number of Days to Update: 69

Source: EPA Telephone: 202-564-2496 Last EDR Contact: 03/24/2016

Next Scheduled EDR Contact: 07/11/2016 Data Release Frequency: Annually

#### US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information

Date of Government Version: 02/09/2016 Date Data Arrived at EDR: 03/02/2016 Date Made Active in Reports: 04/15/2016 Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 03/02/2016 Next Scheduled EDR Contact: 06/13/2016

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008 Number of Days to Update: 49

Source: USGS Telephone: 703-648-7709 Last FDR Contact: 03/04/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Varies

Data Release Frequency: Semi-Annually

#### US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97

Source: USGS Telephone: 703-648-7709 Last EDR Contact: 03/04/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 09/09/2015 Date Made Active in Reports: 11/03/2015 Number of Days to Update: 55

Source: FPA Telephone: (415) 947-8000 Last FDR Contact: 03/08/2016 Next Scheduled EDR Contact: 06/20/2016 Data Release Frequency: Quarterly

#### DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities

Date of Government Version: 03/01/2016 Date Data Arrived at EDR: 03/03/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 33

Source: Environmental Protection Agency Telephone: 202-564-0527 Last EDR Contact: 02/24/2016 Next Scheduled EDR Contact: 06/13/2016 Data Release Frequency: Varies

#### UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015 Date Data Arrived at EDR: 01/29/2016 Date Made Active in Reports: 04/05/2016 Number of Days to Update: 67

Source: Department of Defense Telephone: 571-373-0407 Last EDR Contact: 04/18/2016 Next Scheduled EDR Contact: 07/04/2016 Data Release Frequency: Varies

#### AIRS: List of Permitted Facilities A listing of permitted facilities in the state.

Date of Government Version: 12/29/2015 Date Data Arrived at EDR: 01/05/2016 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 57

Source: Department of Health Telephone: 808-586-4200 Last FDR Contact: 04/04/2016 Next Scheduled EDR Contact: 07/18/2016 Data Release Frequency: Varies

## DRYCLEANERS: Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state

Date of Government Version: 10/05/2015 Date Data Arrived at EDR: 10/08/2015 Date Made Active in Reports: 11/16/2015 Number of Days to Update: 39

Source: Department of Health Telephone: 808-586-4200 Last EDR Contact: 04/04/2016 Next Scheduled EDR Contact: 07/18/2016 Data Release Frequency: Varies

#### Financial Assurance: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 12/23/2015 Date Data Arrived at EDR: 12/29/2015 Date Made Active in Reports: 03/02/2016 Number of Days to Update: 64

Source: Department of Health Telephone: 808-586-4226 Last EDR Contact: 03/14/2016 Next Scheduled EDR Contact: 06/27/2016 Data Release Frequency: Varies

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#### UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 02/07/2013

Date Data Arrived at EDR: 02/12/2013

Date Made Active in Reports: 04/09/2013

Cast EDR Contact: 02/29/2016

Number of Days to Update: 56 Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

#### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide

Date Of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103
Last EDR Contact: 03/23/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

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#### FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

#### **EDR Exclusive Records**

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

## EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limitled to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limitled to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Davs to Undate: N/A
Next Scheduled FDR Contact: N/A
Next Scheduled FDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/.

Data Release Frequency: Varies

#### EDR RECOVERED GOVERNMENT ARCHIVES

#### Exclusive Recovered Govt. Archives

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Date Release Frequency: Varies

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Denatment of Health in Hawaii.

Date of Government Version: N/A Source: Department of Health

Date Data Arrived at EDR: 07/01/2013 Telephone: N/A

Date Made Active in Reports: 01/17/2014

Number of Days to Update: 200

Last EDR Contact: 05/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A Source: Department of Health

Date Data Arrived at EDR: 07/01/2013

Date Made Active in Reports: 01/03/2014

Number of Days to Update: 186

Data Release Frequency: Varies

Data Release Frequency: Varies

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

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#### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

#### Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

#### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

#### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

#### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Source: Office of Planning Telephone: 808-587-2895

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

#### STREET AND ADDRESS INFORMATION

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## GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

#### TARGET PROPERTY ADDRESS

LANAI CITY EXPANSION - 200 HOUSING UNITS AWALUA AVENUE LANAI CITY, HI 96763

#### TARGET PROPERTY COORDINATES

Latitude (North): 20.821115 - 20° 49' 16.01" Longitude (West): 156.923237 - 156° 55' 23.65"

Universal Tranverse Mercator: Zone 4 UTM X (Meters): 716130.6 UTM Y (Meters): 2303606.8

Elevation: 1545 ft. above sea level

#### USGS TOPOGRAPHIC MAP

Target Property Map: 5946085 LANAI SOUTH, HI

Version Date: 2013

Northeast Map: 5945823 LANAI NORTH, HI

Version Date: 2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

#### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

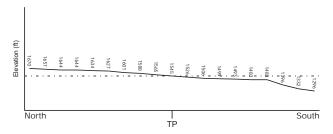
#### TOPOGRAPHIC INFORMATION

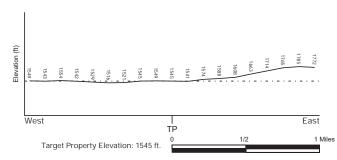
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

TC4620578.2s Page A-1 TC4620578.2s Page A-2

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood

Target Property County

Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Flectronic NWI Quad at Target Property Data Coverage

YES - refer to the Overview Map and Detail Map NOT AVAILABLE

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AOUIFI OW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

> LOCATION GENERAL DIRECTION MAP ID FROM TP GROUNDWATER FLOW Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

#### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT GEOLOGIC AGE IDENTIFICATION

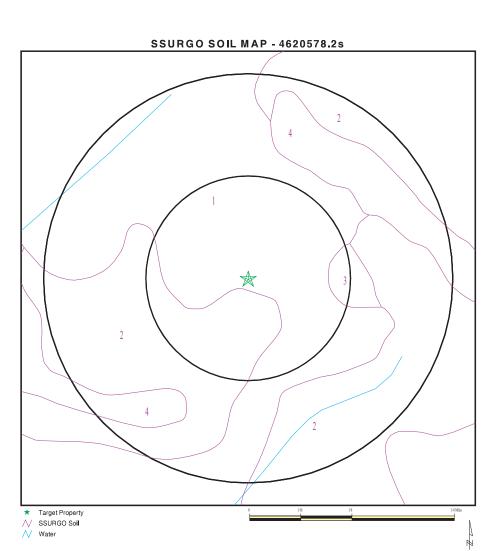
Era: Category: -System:

Series:

Code: N/A (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

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SITE NAME: Lanai City Expansion - 200 Housing Units

ADDRESS: Awalua Ávenue Lanal City HI 96763 LAT/LONG: 20.821115 / 156.923237 CLIENT: TRC CONTACT: Kacey Swindle INQUIRY #: 4620578.2s DATE: May 16, 2016 10:50 pm

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## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Waihuna

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

> 183 inches

water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Depth to Watertable Min:

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Soil Layer Information Saturated Boundary Classification hvdraulic conductivity Soil Reaction Layer Upper Lower Soil Texture Class AASHTO Group Unified Soil Silt-Clay FINE-GRAINED Max: 4.23 Max: 5.5 1 inches 5 inches clay SOILS, Silts and Materials (more Min: 1.41 Min: 4.5 than 35 pct. Clays (liquid passing No. limit 50% or 200), Clayey more), Fat Clay. Soils. FINE-GRAINED Max: 6.5 53 inches 64 inches clay Silt-Clay Max: 1 Materials (more SOILS, Silts and Min: 0.01 Min: 4.5 than 35 pct. Clays (liquid passing No. limit 50% or 200), Clayey more), Fat Clay. Soils. 0 inches 1 inches clay Silt-Clay FINE-GRAINED Max: 4.23 Max: 5.5 Materials (more SOILS, Silts and Min: 1.41 Min: 4.5 than 35 pct. Clays (liquid passing No. limit 50% or 200), Clayey more), Fat Clay. Soils. 18 inches Silt-Clay FINE-GRAINED Max: 1.41 Max: 5.5 clay Materials (more SOILS, Silts and Min: 0.42 Min: 4.5 than 35 pct. Clays (liquid passing No. limit 50% or 200), Clayey more), Fat Clay.

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			Soil Layer	Information				
	Boundary			Classif	ication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec		
5	5 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.42	Max: 5.5 Min: 4.5	
6	40 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1 Min: 0.01	Max: 6.5 Min: 4.5	
7	25 inches	40 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1 Min: 0.01	Max: 7.3 Min: 5.6	

Soil Map ID: 2

Soil Component Name: Lahaina
Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

			Soil Layer	Information			
	Boundary			Classit	Classification		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec	
1	0 inches	14 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 6 Min: 5.1
2	14 inches	31 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6
3	31 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 3

Soil Component Name: Lahaina
Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

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			Soli Layer	Information			
Boundary			Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	14 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 6 Min: 5.1
2	14 inches	31 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6
3	31 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 4

Soil Component Name: Lahaina Soil Surface Texture: silty clay

Class B - Moderate infiltration rates. Deep and moderately deep, Hydrologic Group:

moderately well and well drained soils with moderately coarse

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

			Soil Layer	r Information				
	Boundary  Layer Upper Lower			Classi	fication	Saturated hydraulic		
Layer			Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	0 inches	14 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 6 Min: 5.1	
2	14 inches	31 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6	
3	31 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6	

#### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

1.000

Federal USGS Federal FRDS PWS Nearest PWS within 0.001 miles

State Database 1.000

#### FEDERAL USGS WELL INFORMATION

LOCATION MAP ID WELL ID FROM TP

No Wells Found

MAP ID

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

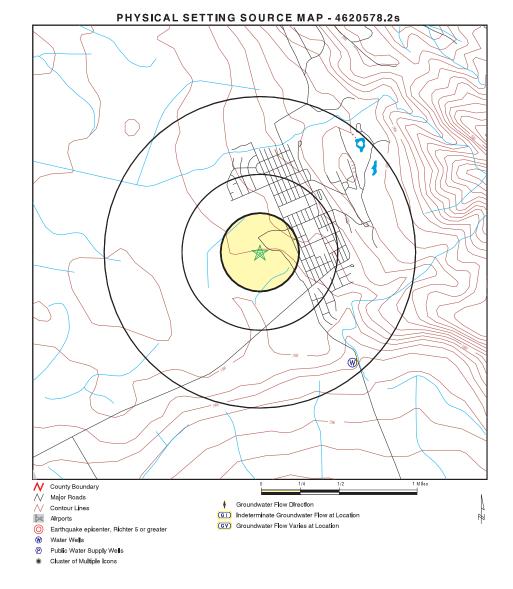
LOCATION WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID WELL ID HI90000000002886 LOCATION FROM TP 1/2 - 1 Mile SE



CLIENT: TRC CONTACT: Kacey Swindle INQUIRY#: 4620578.2s DATE: May 16, 2016 10:50 pm SITE NAME: Lanai City Expansion - 200 Housing Units ADDRESS: Awalua Avenue Lanal City HI 96763 LAT/LONG: 20.821115 / 156.923237

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ID
ctio
anc

Distance Elevation			Database	EDR ID Number
1 SE 1/2 - 1 Mile Lower			HI WELLS	HI900000002886
Wid:	5-4854-001	Island:	Lanai	
Well name:	Lanai 9	Old name:	Not Reported	
Yr drilled:	1990			
Driller:	Water Resources Internati	onal, Inc.		
Quad map:	4			
Long83dd:	-156.914048			
Lat83dd:	20.81082			
Gps:	-1	Utm:	0	
Owner user:	Lanai Holdings, Inc.			
Land owner:	Lanai Resorts LLC			
Pump insta:	Not Reported			
Old number:	Not Reported	Well type:	ROT	
Casing dia:	14	Ground el:	1411	
Well depth:	1451			
Solid case:	510	Perf case:	766	
Use:	IRR - Golf Course			
Use year:	Not Reported			
Init head:	808	Init head2:	Not Reported	
Init head3:	Not Reported			
Init cl:	0			
Test date:	7/20/1990	Test gpm:	336	
Test ddown:	105.1	Test chlor:	Not Reported	
Test temp:	Not Reported	Test unit:	Not Reported	
Pump gpm:	300			
Draft mgy:	Not Reported	Head feet:	Not Reported	
Max chlor:	Not Reported	Min chlor:	Not Reported	
Geology:	QII			
Pump yr:	0	B	40	
Draft yr:	Not Reported	Bot hole:	-40	
Bot solid:	901	Bot perf:	645	
Spec capac:	3			
Pump mgd:		Б	101	
Draft mgd:	Not Reported 951	Pump elev: Tmk:	461	
Pump depth:		TMK:	(2) 4-9-002:001	
Aqui code: Latest hd:	50102	Wcr:	01-JAN-90	
Latest no: Pir:	Not Reported	VVCI:	01-JAN-90	
	Not Reported			
Surveyor: T:	Not Reported 2670	Site id:	HI900000002886	
1.	2070	Site iu:	HI8000000002886	

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for MAUI County: 3

Note: Zone 1 indoor average level > 4 pCi/L. : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L. : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MAUI COUNTY, HI

Number of sites tested: 70

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.057 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.000 pCi/L	100%	0%	0%
Basement	0.150 pCi/L	100%	0%	0%

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#### PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5 Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Office of Planning Telephone: 808-587-2895

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawlec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distribution survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

#### PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Well Index Database

Source: Commission on Water Resource Management

Telephone: 808-587-0214

CWRM maintains a Well Index Database to track specific information pertaining to the construction and installation of production wells in Hawaii

#### OTHER STATE DATABASE INFORMATION

#### RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

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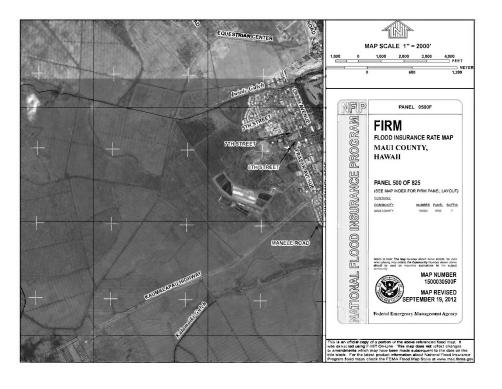
## PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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APPENDIX B: OTHER REFERENCE INFORMATION

TC4620578.2s Page PSGR-3



	in Neighborhood	Previous Parcel	Next Parcel	Return to Main	Search Page	Maui Home
		Owner and	Parcel Informat	ion		'
Owner Name	LANAI RESORTS LLC DEPT OF LAND & NATUR exemption SOH-DEPT OF HUMAN S Show All Owners and Ac	ERVICES Other-exem		SION Other-	Today's Date	May 18, 2016
Mailing Address	ATTN: RHONDA MIKAMI 733 BISHOP ST, SUITE HONOLULU HI 96813				Parcel Number	490140010000
Location Address	0 FRASER AVE				Parcel Map	Show Parcel Map
Neighborhood Code	4942-6				Land Area	83.98 Acres
Legal Information					Parcel Note	
Generate Owner Lis	t By Radius					

	Assessment Information Show Historical Assessments								
Year	Tax Class	Market Land Value	Agricultural Land Value	Assessed Land Value	Building Value	Total Assessed Value	Total Exemption Value	Total Net Taxable Value	
2016	CONSERVATION	\$ 372,600	\$ 0	\$ 372,600	\$ 22,400	\$ 395,000	\$ 92,800	\$ 302,200	

		Curre	nt Tax Bill Info	ormation 2016	Tax Paymen	ts Sh	ow Historica	l Taxes		
Tax P	eriod	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due
			No Tax I	nformation available	on this parcel.					

# Improvement Information No improvement information available for this parcel.

	Access	ory Information			Accessory Information								
Building Number	Description	Dimensions/Units	Year Built	Percent Complete	Value								
1	MASONRY UTILITY SHED	0x0 280 / 1	1997	100 %	\$ 13,800								
1	CARPORT OPEN ASPH/CONC FLOOR	0x0 96 / 2	1997	100 %	\$ 2,900								
1	QUONSET SHED	0x0 1,100 / 1	1942	100 %	\$ 5,700								

	Sales Information										
Sale Date	Price	Instrument #	Instrument Type	Valid Sale or Other Reason	Document Type	Record Date	Land Court #	Land Cour Cert			
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09/25/2012	\$ 0		Land Court Order (all types)		Land Court Order (all types)	10/02/2012	T8310375				
03/01/2006	\$ 0		Mapping		Land Court	03/01/2006					
10/07/2002	\$ 0		Fee conveyance		Warranty deed	12/12/2002	2870295				
05/11/2001	\$ 0		Mapping		Land Court	05/11/2001					
01/19/1999	\$ 0	0000000000									
01/09/1999	\$ 0	0000000000									
02/06/1997	\$ 0	0000000000				02/25/1997	2367032	468683			
12/16/1996	\$ 0	0000000000									
10/09/1995	\$ 0	0000000000				12/13/1995	2277888	332446			
10/22/1992	\$ 0	0000000000									
12/23/1991	\$ 0	0000000000									
12/23/1991	\$ 0	0000000000									
06/01/1990	\$ 0	0000000000				06/29/1990	1742831	96990			

## Page 2 of 2

09/12/1989	\$ 0	0000000000					
12/28/1988	\$ 0	0000000000	Fee conveyance		08/27/1990	1758616	355592
07/12/1988	\$ 0	0000000000					

Permit Information								
Date	Permit Number	Reason	Permit Amount					
03/31/2004	B20040585	Retaining Wall	\$ 300,000					
08/27/2003	200331718	Garage	\$ 100,000					
02/07/2001	241	New res dwelling	\$ 104,000					
02/07/2001	240	New res dwelling	\$ 1,040,000					
02/07/2001	239	New res dwelling	\$ 104,000					
02/07/2001	0241	New res dwelling	\$ 104,000					
05/26/1998	980831		\$ 104,000					
05/26/1998	980830		\$ 104,000					
10/31/1997	971813		\$ 104,000					
10/31/1997	971812		\$ 104,000					
10/31/1997	971811		\$ 104,000					
10/31/1997	971810		\$ 104,000					
10/31/1997	971809		\$ 105,000					
10/31/1997	971808		\$ 104,000					
10/31/1997	971807		\$ 104,000					
10/31/1997	971806		\$ 104,000					
10/31/1997	971805		\$ 104,000					
10/31/1997	971804		\$ 104,000					
01/25/1996	960102		\$ 40,000					
01/25/1996	960101		\$ 40,000					

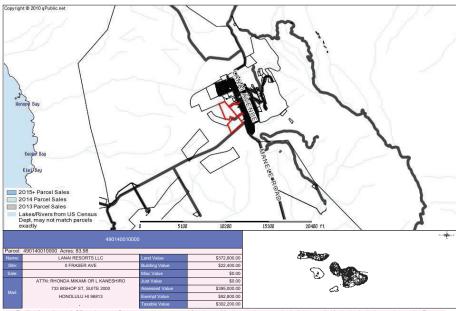
Recent Sales in Neighborhood Recent Sales in Area	Previous Parcel	Next Parcel	Return to Main Search Page	Maui Home
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Page 1 of 2

MAUI  Recent Sales in Neigh		Previous Parcel	Next Parcel	Return to M	ain Search Page	Maui Home
Recent Sales in	Area		Parcel Informat			
	LANAI RESORT		raicei Illioillia	.1011		
Owner Name	LANAI SUSTAIN	S LLC — Fee Owner NABILITY RESEARCH, LLC <u>rs and Addresses</u>	Leasee	Today's	Date M	ay 18, 2016
Mailing Address	ATTN: RHONDA 733 BISHOP ST HONOLULU HI			Parcel N	umber 4	90020610000
Location Address	0 KAUMALAPAL	HWY		Parcel M	ap S	how Parcel Map
Neighborhood Code	4962-5			Land Are	ea 1	6124.188 Acres
Legal Information				Parcel N	ote	
Generate Owner List By Rad	dius					

	Assessment Information Show Historical Assessments											
Year Tax Market Agricultural Assessed Building Assessed Assessed Scape Value V								Net Taxable				
2016	AGRICULTURAL	\$ 8,465,200	\$ 3,213,700	\$ 3,213,700	\$ 0	\$ 3,213,700	\$ 0	\$ 3,213,700				

Agricultural Assessment Information								
Acres	Description	Assessed Value						
90	DIVERS GD	\$ 45,000						
10868	PASTUR	\$ 456,456						
5166.188	PRIMARY SITE	\$ 2,712,200						
This parcel has land in agricultural usage and therefore agricultural usage assessments have been made.								

Current Tax Bill Information 2016 Tax Payments Show Historical Taxes										
Tax Period	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due	
No Tay Information available on this parcel										

Improvement Information
No improvement information available for this parcel.
No improvement information available for this parcel.

Accessory Information										
Building Number	Building Number Description Dimensions/Units Year Built Percent Complete Valu									
	No accessory information associated with this parcel.									

	Sales Information											
Sale Date	Price	Instrument #	Instrument Type	Valid Sale or Other Reason	Document Type	Record Date	Land Court #	Land Court Cert				
06/26/2015	\$ 0		Land Court Order (all types)		Land Court Order (all types)	07/08/2015	T9312234					
09/27/2012	\$ 0		Land Court Order (all types)		Land Court Order (all types)	10/02/2012	T8310375					
06/22/2012	\$ 4,698,400		Fee conveyance		Warranty deed	06/22/2012	T8208437	1044094				

Permit Information								
Date	Permit Number	Reason	Permit Amount					
05/16/2014	BX20140029	Farm bldg	\$ 0					
05/06/2014	BX20140027	Farm bldg	\$ 0					

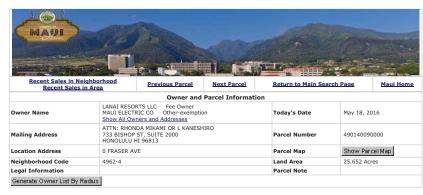
Previous Parcel	Next Parcel	Return to Main Search Page	Maui Home

Recent Sales in Neighborhood Recent Sales in Area

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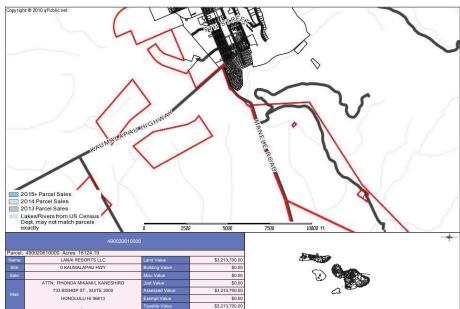
	Assessment Information Show Historical Assessments										
Year	Tax Class	Market Land Value	Agricultural Land Value	Assessed Land Value	Building Value	Total Assessed Value	Total Exemption Value	Total Net Taxable Value			
2016	INDUSTRIAL	\$ 1,116,100	\$ 0	\$ 1,116,100	\$ 532,000	\$ 1,648,100	\$ 379,500	\$ 1,268,600			

	Curre	nt Tax Bill Info	ormation 2016	2016 Tax Payments Show Historical Taxes					
Tax Period	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due
	No Tax Information available on this parcel.								

			1	[mprov	ement Info	rmatio	n					
<b>Building Numbe</b>	r Style	Y	ear Built		Eff Year	Built	Per	cent Complete	Liv	ing Area	Construc	tion Type
3	Contempo	rary	1940					100 %		580	Fra	ime
Heating/Cooling	Exterior \	Wall Bedrooms/	Full Bath/Ha	alf Bath	Roof Ma	terial		Fireplace	Build	ding Value	Ske	tch
NONE	FIR/PIN	E	1/1/0		Composition	Shingle			\$	4,000	Sketch B	uilding 1
Building Numbe	r Style		ear Built		Eff Year	Ruil+	Don	cent Complete	Liv	ing Area	Construc	tion Tyne
4	Contempo	-	1936		Lii reai	Dunc	rei	100 %		1,408	Frame	
Heating/Cooling				alf Bath	Roof Mai	torial		Fireplace		ding Value		
J,				in Datii				Періасе				
NONE	FIR/PIN	E	1/1/0		Corrugated	metai			. \$	2,700	Sketch Building 2	
			Comme	ercial I	mproveme	nt Infor	mat	ion				
Building Number	Building Type	Structure	Year Built	Eff Y	Year Built	% Compl	ete	Building Squ Footage	are	Ske	etch	Value
1	POWER PLANT	COMMER MASONRY C3	1948			100	%	8,016		Sketch B	uilding 3	\$ 525,30
Section	Floor #	Area	Perimeter		Jsage	Wal Heigl		Exterior W	all		Constructio	n
1	01	6816	380	MANUE	FACTURING	29		MASONRY C	MU		MASONRY	,
2	01	600	66	MANUE	FACTURING	12		MASONRY C	MU		MASONRY	,
3	01	600	66	MANUE	FACTURING	12		MASONRY C	MU		MASONRY	,

Accessory Information								
Building Number	Description	Dimensions/Units	Year Built	Percent Complete	Value			
No accessory information associated with this parcel.								

	Sales Information								
Sale Date	Price	Instrument #	Instrument Type	Valid Sale or Other Reason	Document Type	Record Date	Land Court #	Land Court Cert	
06/26/2015	\$ 0		Land Court Order (all types)		Land Court Order (all types)	07/08/2015	T9312234		
						1			



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## Page 2 of 2

09/25/2012	\$ 0		Land Court Order (all types)	Land Court Order (all types)	10/02/2012	T8310375	
12/31/2008	\$ 0		Easements	Grant of easement	04/21/2010	3957190	799954
03/01/2006	\$ 0		Mapping	Land Court	03/01/2006		
05/22/2001	\$ 0		Mapping	Land Court	05/22/2001		
02/06/1997	\$ 0	0000000000			02/25/1997	2367032	468683
12/16/1996	\$ 0	0000000000					
01/07/1992	\$ 0	0000000000			01/07/1992	1879235	332446
09/12/1989	\$ 0	0000000000					

	Permit Information								
Date	Permit Number	Reason	Permit Amount						
	No permit information associated with this parcel.								

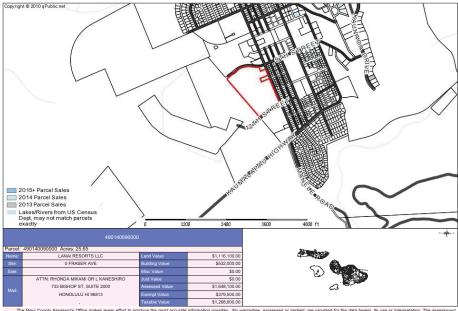
Recent Sales in Neighborhood Recent Sales in Area	Previous Parcel	Next Parcel	Return to Main Search Page	Maui Home				
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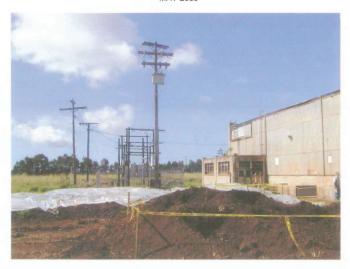


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# An Evaluation of the Old Lanai Electrical Plant

for Lanai Company

MAY 2003



Maul Architectural Group, Inc.

2331 W. Main St Walluku, Maui, HI 96793-1661

Phone: 808-244-9011 Fax:808-242-1776 Email: mag@mauiarch.com www.mauiarch.com

Maui Architectural Group, Inc.

May 21, 2003

## INDEX

## General Background

Location, Existing Use, and Intended Use

## | Facility Description

Site Easements, Buildings General Description

## III Regulatory Overview

Zoning, State Land Use, Community Plan, Building Occupancy, Construction Type, Exiting Requirements, Accessibility

## IV Facility Analysis

Civil, Architectural, Structural, Plumbing, ventilation, and Electrical.

## / Appendices

## A. Facility Reports

Civil Report, including Site Drainage, Water Systems, Fire Protection, Sewer Systems, Access and Parking.

Structural Report, including Structural Review of building components and recommendations.

Mechanical Report including air conditioning and ventilation requirements, plumbing requirements and fire protection.

Electrical Report, including General Electrical Systems, Telephone, and Fire Alarm Systems.

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- B. Drawings
  Building Floor Plan
- C. Attachments
  Exhibit B
  Maui County Code 19.31.010
  Vuich Proposal
  Letter dated 2/26/03 by Maui Electric Company re: Form I PCB
  Letter dated 8/31/00 by Maui Electric Company re: Easements

Maui Architectural Group, Inc.

May 21, 2003

## I. GENERAL BACKGROUND

#### LOCATION

The following report is a feasibility study of the Old Lanai Electric Plant, previously called Koele Substation No. 301 & 301-B. The site is located on an off shoot of Awalua Road in the vicinity of 9th Street and Fraser Ave., Lanai City, Lanai, Hawaii, TMK: (2) - 4-9-014: 009. The project site of approximately 26 acres has 3 buildings, the main 8,000 +/-Sq. Ft. structure, and two much smaller free-standing structures. Additionally, the site contains an active Electric sub-station. The property is mostly covered in natural vegetation

#### **EXISTING USE**

The site, zoned P-1, was until 1988 operated as a power plant by Dole Company. In 1988, Maui Electric Company, Ltd. (MECO) took over the facility and operated the power plant until 1996. MECO vacated the premises in the year 2000. Existing site structures are of an unknown age. The total square feet of the remaining main structure is 8,000 +/-. Additionally there exists two small ancillary storage sheds, and a fenced sub-station.

#### INTENDED USE

Lanai Company's goal is to revitalize this facility as a storage facility, with possible office space. This facility would provide storage for low hazard materials. The following feasibility study is offered to assist Lanai Company in planning for its future goals.

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Page 2

## II. FACILITY DESCRIPTION

## SITE EASEMENTS

## **EASEMENT A-1 SUBSTATION EASEMENT:**

The substation holds an easement increasing the original 22'-6" x 46'-0" substation to 40'-0" x 60'-0". In addition to the substation site, a 7'-0" x 16'-0" easement is in effect to accommodates overhead utility lines. Easement A-1 contains 2,576 sq.ft. (See attached letter dated 8/31/03 by MECO re: Exhibit B) (Fig 008, 131)

#### EASEMENT A-2 A B & C ACCESS EASEMENTS:

A-2 a. and b address access to the site and constitute .199 acres, and 1.234 acres respectively. The easements align to provide a roadway for 9th Street to the power plant site. A-3 c. an easement of approximately 7,600 sq. ft. provides



Fig 008 Site



Fig. 131 Site

## BUILDINGS GENERAL DESCRIPTION







Fig. 091 Shed 1

Fig. 022 Shed 2

for a 15' wide path for power lines. (See Exhibit B)

There are three separate structures on the property varying from the main, one story, concrete masonry and metal frame building (Fig 016), and two small metal roofed, metal framed shed structures (Fig 091, 022).

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May 21, 2003 Page 3

MAIN BUILDING - This is the main building and it appears to be structurally sound and will require only minor structural improvements. It exists of one great open portion flanked on either side by smaller masonry appending rooms. Floor is slab on grade, wall sheathing is asbestos sheets with numerous openings to accommodate the former tenant. (Fig 020, 108). Interior partition walls are at a minimum, generally doors and windows are in poor condition. Roof is a built up roofing system with built in gutters.

SHED 1 & 2 - These shed structures are of light weight metal frame construction and are in generally poor condition.





Fig 020 Asbestos Wall Panels with Patches

Fig 108 Deteriorated Windows And Doors

## III. REGULATORY OVERVIEW

## ZONING:

The parcel of land on which the buildings are located TMK: 2-4-9-014: 009 is currently zoned P-1, Public /Quasi-Public (See attached Maui County Code 19.31.010). Because this property has P-1 designation and an M-1 designation is probably desired, certain use permits would have to be obtained. The exact Use - permitting requirements should be clarified with the Departments of Public Works and Planning.

A classification of the intended use must be made by the Maui County Planning Department. An application for a use variance from the County Planning Department as well as the Board of Variance Appeals could then be made. A successful application could result in a permanent use variance.

An application to request a change the zoning could also be made to the Maui County Council. As a temporary solution, a conditional use permit could be requested from the Maui County Council.

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# REGULATORY OVERVIEW (CONT.)





Fig 027 One Large Room

Fig 062 Typical Wing Room

STATE LAND USE: TMK: 2-4-9-014: 009 is designated as Urban use. State Land Use Commission designation of Urban is compatible with the intended use as Stor-

COMMUNITY PLAN: TMK: 2-4-9-014: 009 is, in the location of the facility, designated as Open Space. The Community Plan designation will have to be changed to match the final zoning. This process requires approval from the County Council. The Community Plan designation of Open Space is inconsistent with both the current and future zoning. A request to the Lanai Community Planning Commission for an amendment would be required. Such a request may trigger an Environmental Impact Statement assessment.

## BUILDING OCCUPANCY:

Prior to the occupancy or use of this facility as a storage facility, a Certificate of Occupancy from the Maui County Land Use and Codes is required. The award of a Certificate of Occupancy is contingent upon successful compliance with the recommendations of various County departments.

The proposed S storage occupancy is defined in the UBC as follows: Group S occupancies shall include the use of a building or structure, or a portion thereof, for storage not classified as a hazardous occupancy. Storage occupancy shall include the following:

Division 1 Moderate hazard includes storage of combustible materials. Division 2 Low hazard occupancies shall include storage on noncombustible materials, including but not limited to .... metal furniture, cold storage, beer or wine, dairy products, food, fresh fruit, frozen foods, meats in designated packaging types, etc.

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# REGULATORY OVERVIEW (CONT.)

CONSTRUCTION TYPE: The building construction type as defined by the UBC would be Type VN (V-non rated). The maximum allowable floor area would be 12,000 square feet for S-2 occupancy, and 8,000 square feet for S-1 occupancy. Existing main building equals 8,000 +/- square feet. A fire sprinkler system would be require for high stack storage use.

**EXITING REQUIREMENTS:** The 1997 UBC Table 10A states that buildings used for storage have an occupant load requirement of 300 sq. ft. per occupant. An area of 8,000 sq. ft. would have an occupant load of 30 persons. Given the intended use as a storage facility with some area dedicated as office space, two exits would be required, one at each end of the building.

ACCESSIBILITY: The work place environment must comply with Title III of the Americans with Disabilities Act of 1990. Generally speaking, the act provides for the accessibility by employees to the work place. This requires that individuals with disabilities are able to approach, enter, and exit work areas, common use areas, and public areas.

> There must be an accessible route from paved handicap parking and van stalls to an accessible building entrance per occupant load requirements. Such a route shall be a minimum of 36" wide and should include sidewalk curb cuts and ramps as required. Doors shall provide a minimum clear opening of no less than 32" (at the 90 degree opened position) with lever hardware, closers, and thresholds that comply with ADA requirements. At least one bathroom facility should comply with ADA requirements. Refer to Department of Justice 28 CFR Part 36, Chapter 4, Appendix A "Standards of Accessible Design", for more complete information.

## IV. FACILITY ANALYSIS

SITE: (SEE CIVIL REPORT)

All newly graded areas should be grassed to stop erosion. New paved parking, loading zone, and access will be required. Given intended use as storage facility with some area dedicated as office space, new paved parking stalls would be required, to include one Accessible parking stall. Additionally, a 12' x 35' loading zone should be provided. Currently, a fire hydrant is on site. (Fig 008, 116)





ig 116 Site

Fig 008 Site

# STRUCTURAL: (SEE STRUCTURAL REPORT)

In general the building recommended for renovation requires only minimal structural upgrades. Cracks in masonry walls must be repaired. (Fig 066, 107) Former floor openings seem to have been improperly filled and capped with concrete slabs. These improper repairs should be refilled with properly compacted fill, then resurfaced with concrete slabs. In general, the floors contain areas that have cracks and irregularities which need to be filled or removed. A flow able, cementitious floor self-leveling material is suggested. (Fig 067, 034)







Fig 067 Floor Cracks

Fig 066 Masonry Cracking

Fig 107 Masonry Cracking

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May 21, 2003 Page 7

# IV. FACILITY ANALYSIS (CONT.)

# PLUMBING & VENTILATION: (SEE MECHANICAL REPORT)

Plumbing fixtures need replacement to meet current code and accessibility requirements. There is no existing air conditioning or ventilation systems. Sprinkler system would be required for a high stack storage facility.



Fig 075 Sanitary Facilities

# ELECTRICAL: (SEE ELECTRICAL REPORT)

There is no existing fire alarm system. A system would be required in order to meet current code. Interior lighting is generally operational but rearrangements and additions will be required. The facility needs exterior site and building lighting. Communications require upgrading.



Fig 034 Floor Obstruction

## ARCHITECTURAL REPORT







Fig 087 Shed Building C



Fig 103 Shed Building B

#### **DEMOLITION:**

Demolish existing free standing out building. (Fig. 022, 087, 103) Demolish Abandoned site slabs. (Fig. 110, 109) Remove existing site refuse. (Fig. 006)

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## ARCHITECTURAL REPORT (CONT.)







Fig 110 Abandoned Slabs

Fig 006 Refuse

## **ENVIRONMENTAL EVALUATION:**

A building Materials Survey should be performed in order to determine the extent of any existing environmental contaminants which may be present. (See attached Vuich Services Proposal) It is suspected the wall cladding has a high asbestos content which will require special procedures in order to comply with OSHA. (Fig 020, 057) MECO tested soil at the former transformer storage area at the site for the presence of PCBs. MECO indicates the lab results show only trace amounts of PCBs.

below the level at which a clean up would be warranted by the State Department of Health. (See attached letter dated 2/26/03 by MECO re: Form I PCB)



Fig 020 Asbestos Cladding



Fig 138 Petroleum Product Contaminated Soil



Fig 057 Interior Cladding Patches

# PAINTING:



Fig 073 Typical Interior Surfaces to be Painted

Contain/Repaint all paint able surfaces: (Per Survey recommendations) All interior paint able surfaces need repainting. Follow recommended procedures and requirements. Patch, prep and paint in accordance to acceptable asbestos containment protocol. (Fig. 073)

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# ARCHITECTURAL REPORT (CONT.)

TERMITE REPAIR: Repair/replace or remove termite damage as required.

ROOF REPAIR: Existing built-up roof systems seem adequate, however, a more thorough evaluation should be undertaken to determine expected life cycle. (Fig. 119)

GUTTERS & DOWNSPOUTS: Flashing and gutters generally appear to be in poor condition. Gutters and down spouts should be cleaned, inspected and repaired or replaced as required (Fig. 137,124)



Fig 119 Wing Roof

VENT REPAIR: Provide new vents and bug screening for roof ventilation. (Fig. 106)



Fig 106 Vents

May 21, 2003



Fig 137 Gutters



Fig 124 Gutters

DOORS & WINDOWS: Most exterior doors are in poor condition and need replacement. Doors require new hardware including requirements for handicap. (Fig. 023, 021) Replace all exterior doors and windows and frames with new. Metal frame windows or glass block may be used for added security. Provide new fire rated interior doors at all corridors and area separations. Replace all remaining non-rated doors with solid core wood doors. Provide new frames as necessary. Hardware shall comply with handicap requirements. (Fig. 074)



Fig 023 Windows to be replaced



Fig 021 Windows to be replaced



Fig 074 Interior Doors

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#### PROPERTY DESCRIPTION

The project site is designated as Tax Map Key (2) 4-9-14: 09, Lanai City, Island of Lanai, District of Lahaina, Maui, Hawaii. The area of the parcel is 25.98 acres and is zoned P-1 Public / Quasi-Public. The State land use designation is Urban.

The property is located on Fraser Avenue between 9<sup>th</sup> Street and 12<sup>th</sup> Street in Lanai City. There are several easements that traverse the property. The existing site has several vacant buildings that previously housed electrical generators and other equipment for Maui Electric Company, Ltd.

#### **TOPOGRAPHY**

The subject parcel is located on the western edge of Lanai City. The large parcel is mostly undeveloped. There are many large trees on the property but not in the vicinity of the existing building. Electrical power lines traverse the property in a northwest – southeast direction. The ground slopes in a southwesterly direction from Fraser Avenue to the back of the lot.

#### FLOOD HAZARD

The project site is located in Zone C therefore is not subject to the requirements of the Flood Hazard District Ordinance, Chapter 19.62 of the Maui County Code.

#### ACCESS

Vehicular access to the project site is available from Fraser Avenue by way of 9<sup>th</sup> Street. Ninth Street west (makai) of Fraser Avenue has varying right-of-way widths and is a dirt road. There is also an access easement that traverses the property from 9<sup>th</sup> Street to 12<sup>th</sup> Street.

#### WATER

There is an existing fire hydrant adjacent to the subject building, which suggests that there is sufficient water available at the site for fire protection. This needs to be confirmed by Lanai's water department.

## WASTEWATER

There is an existing 12-inch sewer main that traverses the property within a sewer and access easement. Wastewater is treated by the County reclamation facility and the reclaimed water is used for irrigation purposes at the Koele Resort.

#### DRAINAGE

Lanai City has very limited drainage facilities to collect and direct the runoff to the ocean. Any new development would be expected to retain additional runoff onsite or develop new drainage infrastructure. There is sufficient area on the subject property to locate retention basins or dry wells to contain, at minimum, the additional runoff generated by the development.

Page 1

#### An Evaluation of the

# Old Lanai Electrical Plant

for Lanai Company February 6, 2003

## OVERVIEW

This brief report addresses the general structural condition of the Old Lanai Electrical Plant located makai of Fraser Avenue in Lanai City. The building is currently unoccupied as all electrical equipment has been removed.

An on-site inspection was made on Tuesday, February 4<sup>th</sup>, 2003. The inspection was limited to what was visibly apparent. The purpose of the inspection was to assess the condition of the primary structural system which in turn, may be useful in determining the economic feasibility of rehabilitation. No effort has been made at this time to demonstrate that the structure complies with the provisions of the current building code.



Fig. 003 MECO Building Lanai South Elevation



Fig. 016 MECO Building Lanai North Elevation

## GENERAL DESCRIPTION

The building is comprised of a main section and two adjacent wings at one end. The wings have equal floor area and are located on both sides of the main structure thereby forming a "T" shaped footprint. (003,016) The main structure which had housed the electrical generators is single-story, approximately 20 feet in height. (007,099) The wings, also single-story, have a height of approximately 12 feet. The main section is 48x142 feet in plan. The wings are each 42x15 feet in plan. The total enclosed floor area is then approximately 8000 square feet. The floor plan may be seen in Figure 1.

The building is a structural steel frame on a poured concrete foundation. The site is flat with deep soil, and in relatively open terrain. The age of the building is unknown and no construction documents are known to exist.



Fig. 007 MECO Building Elev . at Overhead Doors



Fig. 099 MECO Building Lanai End Elevation

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## FOUNDATION

The nature of the below grade foundation elements was not determined. It may be expected that perimeter walls would have been constructed on a continuous strip footing. A visual inspection of the exterior showed no signs of significant settlement or cracking in the perimeter foun-

dation. Because the roof spans between exterior walls, no interior column footings were required. There are, however, numerous foundation elements which were needed to support the electrical equipment. Pits were constructed below grade to provide further access to the equipment. The exact nature of these pits could not be determined as some of the pits have been filled and concrete slabs placed over them. The access stairs, situated between the overhead doors, and a single corridor which runs the entire length of the building are all that appear to remain. Further investigation was not possible as the corridor was partially flooded. (051)



Fig 051 Below Grade Corridor (Pit Access)

Settlement and accompanying cracking in at least one filled-pit location would indicate that consolidation of the fill was not properly done. Rehabilitation would most likely require removing all "new" slabs, consolidation of suitable fill material, and slab replacement. Several housekeeping slabs (which have been or can be removed), equipment anchor bolts which have been cut off, and the generally irregular slab surface would suggest the use of a flow able, cementitious, floor leveling material. The topping could be hardened if light vehicular or fork-lift traffic is to be expected.

# STRUCTURAL STEEL FRAME (MAIN SECTION)







Fig 085 Base of Frame Column

The structural steel frame of the main building consists of wide-flange columns and (6-panel) Pratt roof trusses. The roof trusses are fabricated from double-angle members and are approximately 4 feet deep. The top chord is slightly pitched to provide roof drainage. The columns extend to the eave height and form a moment-frame with the first panel of the trusses. (028) The condition at the column base is unknown as it is enclosed within the floor slab. (085)

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## STRUCTURAL STEEL FRAME (CONT.)

These frames span the 48-foot building direction. Additional roof framing members (purlin trusses) are placed at each of the truss panel points and provide not only out-of-plane stability to the roof trusses but also support for the light-gauge metal roofing. (040) Horizontal xbracing comprises the roof diaphragm. (069) Without selective demolition of the built-up roof, it cannot be determined if the light-gauge roofing contributes to the roof diaphragm. The building is braced in the longitudinal direction by x-configuration rod bracing. (043)







Fig 069 Horizontal Diaphragm (Bracing)



Fig 043 Longitudinal Rod Bracing

## WALLS



Fig 080 Corrugated Wall Panels

The lower portion of the walls appear to be fabricated from concrete bricks. These walls extend to approximately 5 feet above grade for most of the structure with the exception of the two wings and the 48-foot gable-end Fig 069B Gable End Wall (Brick); Wind Columns wall opposite the over-

head doors. At these locations the

bricks extend full height. For the three walls of the main section (for which the bricks extend to the 5 foot elevation), the upper portion is clad in rigid, corrugated panels, apparently of asbestos. (080) The panels are through-bolted to 4" (vertical) x 3" (horizontal) angle girts. The girts attach to the columns. Gable-end walls have two intermediate wind columns. (044,069)





Fig 044 Gable End Wall (OHD); Wind Columns

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## STRUCTURAL SYSTEM (WINGS)



Fig 064 Typ. Framing in Wing Structures

The wings are framed for gravity loads with Wshaped columns and roof beams. (064) Shear-only framing connections, and the lack of bracing members, would imply the lateral resistance would depend upon the exterior walls. However, due to the large window penetrations, it is more likely that these small wing structures rely upon the main building for their lateral strength.

Light-gauge metal roofing and a built-up roof, similar to the high roof, was used. However, unlike the main roof, the light-gauge deck comprises the entire roof diaphragm.

## GENERAL CONDITION

- (i) Foundation/Slabs: The foundation appears to be generally sound and shows no visible signs of distress. Those portions of the slab that are showing signs of settlement (filled pits) should have the existing slab removed, receive proper compaction of the sub-grade, and a new slab placed. The access stairs and corridor would probably also be filled. The entire floor would benefit from a finish topping to provide a uniform, level surface.
- (ii) Walls: The walls appear to play no part in the structural system but rather form the building envelope. However, the corrugated panels would need to be addressed. The existence of numerous pene- Fig 002 Wall Panel Penetrations trations from earlier equipment ducting, as well as,



the is-

sue of asbestos fibers will necessitate rehabilitation. (002) Shear cracks initiated at the corners of the window openings in the brick walls of the wings would also need to be repaired.

- (iii) Structural Frame: The steel frame appears to be in very good condition and should require minimal effort to restore to original condition. An as-built survey should be performed and a determination made as to compliance with current building code provisions.
- (iv) Roofing: From the underside, the metal decking appears to be in generally good condition.

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