the vicinity of the fire-pit, combined identification and dating analyses potentially yield a record of regional vegetation change over time. The plausibility of the assumption and the ability of the combined identification and dating analyses to yield a record of regional vegetation change over time were established at Waimānalo, O‘ahu, where replacement of the native lowland forest with cane plants brought to the islands by Polynesian settlers was underway by the mid-fifteenth century [16].

The ten fire-pits investigated in this way on Lāna‘i are located on the windward and south coasts and in the central basin and plainea (fig. 12). On the windward coast, the fire-pits include one exposed on the surface at Kaliu‘ipapela, and two other buried fire-pits identified in a backhoe excavation [11]. The two fire-pits investigated on the south coast were found during excavation of a beach sand deposit that was buried under alluvium deposited during and after ranching had destabilized the island’s slope [15]. The fire-pit on the central plainea at Site 50-40-98-01884 was exposed on an eroding surface located on the outskirts of an abandoned pineapple field. In addition to the fire-pits in the central basin investigated in this report, the two fire pits at Sites 50-40-98-01884 and -01887 were discovered beneath the plow zone of an abandoned pineapple field [13].

The calibrated ages of the individual fire-pits have already been reported [11, 13-15]. The reported dates can be used to investigate the tempo of fire-pit construction and use on Lāna‘i by turning away from the estimated ages of individual fire-pits and asking instead when was the first occurrence of fire-pit construction and use, when was the second occurrence of fire-pit construction and use, etc. Posing the question in this way builds upon the event view of time used in the radiocarbon dating analysis to employ instead a substantive view of time typified by use in archaeological questions. The substantive view of time focuses analysis on change, which is expressed on an absolute time scale. On the evidence of fire-pit construction and use on Lāna‘i, began in the late fifteenth century and continued into the historic period (fig. 13).

![Fire-pit construction and use on Lāna‘i](image)

**Figure 13:** Occurrence of fire-pit construction and use on Lāna‘i.

Identification of firewood used in the Lāna‘i fire-pits indicates the presence of the historic period of native forest, with relatively little replacement of native species by cane plants. This finding contrasts strongly with the documented transformation of the lowland forest at Waimānalo, where cane plants were well established by the middle of the twentieth century (fig. 14). At a time when most Lāna‘i fire-pits were fueled exclusively with native woods, Waimānalo fire-pits regularly yield firewood assemblages dominated by cane plants. The transformation of the lowland forest evidenced at Waimānalo started late on Lāna‘i and had made relatively little progress before the island’s vegetation history was radically altered during the ranching era [19].

5 Conclusion

Wood charcoal identification and dating lend support to the claim made by Hawaiian tradition that Lāna‘i was settled relatively late. Current evidence from the island suggests that the first fire-pits were constructed 400-500 years after Polynesians discovered the islands. However, it is extremely unlikely that the earliest evidence for human activity on
Lānaʻi has been identified. Most of the well dated fire-pits are from the island’s interior and the dry southern coast, which are relatively unlikely locations for early settlement. A likely location for early settlement is the windward coast in the vicinity of Maunalei Valley. The combination of a perennial stream that could feed ‘Io‘i‘io, sand beaches, shallow water fishing grounds, and relatively easy access to Māna and Mala‘i’i’s islands all point to the desirability of the island’s windward coast for early settlement. Only a few fire-pits from the windward coast of Lānaʻi have been identified and dated at Kahakulau, a location that lacks the agricultural resources that would have been available at Maunalei, and would likely have been settled at a later time.

The windward Lānaʻi coastline that Hawaiians know is today deeply buried by sediment that crested off the mountains during and after the ranching period, when large herds of grazing herbivores wreaked havoc on the native vegetation and destabilized soils over much of the island [19]. The widespread severe erosion of upland soils that resulted likely led the effect of sealing early cultural deposits along the windward coast under a thick blanket of sediment that serves to protect them from erosion and disturbance. In the event the windward coast of Lānaʻi is developed, one focus of historic preservation efforts should identify and recover evidence of this early settlement.

The canoe plants brought to the islands by Polynesian settlers had begun to replace native species in lowland forests by the middle of the eighteenth century at places like Waimānalo on Oʻahu. This replacement of native forest by canoe plants favored by Polynesians is referred to by geographers as a process of landscape transport in which immigrants seek to create settlements that resemble those of the homeland. The process of landscape transport appears to have had relatively little effect on Lānaʻi prior to the ranching era, fire-pits that date late in the traditional Hawaiian period and early in the historic period were found almost exclusively by wood from native plants that were well adapted to the island’s dry conditions and were likely established in the island’s primary forests. Canoe plants are only rarely identified in fire-pits from the island’s beaches from Kahakuloa, Ulupouna, and Hoomaluhia, and are from Kāne‘ohe, are exceptions that prove the rule of native firewood on the island. In this respect, one conclusion of an early inquiry into Lānaʻi’s firewood at Kaunolū—that “many dryland forest taxa apparently persisted in this region until sometime after the abandonment of the Kaunolū settlement in the mid-HOY’s” [11]—appears to apply more widely and likely characterizes the vegetation history of the island as a whole.

Archaeological study of the island’s stone tools is at an early stage. A reduction sequence in which an initial step removed a large flake from a bed of suitable adze rock seems to have been most common. This reduction sequence based on flakes was practiced widely in Hawai‘i and was particularly common during production of small adzes. The Lānaʻi adze reject sourced for the Mākaha Basin 300 Acre Industrial Development project were likely fashioned from local rocks, but there can be little doubt that imported adzes will be identified on the island with subsequent research. Adze rock collected from traditional Hawaiian sites in Kaua‘i and on Maui Island is reliably sourced to Kaunolū, so adze rock was definitely moving across the narrow channel between the islands. Additional research on Lānaʻi stands a good chance of turning up evidence for the import of adze rock from islands nearby.

The discriminant analysis framework outlined in this report indicates the non-destructive EDXR analysis carried out by the Hawai‘i Geophysical Laboratory is sufficiently powerful to distinguish at least two Māna Island sources and the fine-grained adze rock from Kaua‘i on Lānaʻi adze rocks. Other potential imports, Waialeale on O‘ahu, Kaua‘i on Hawai‘i, and likely several other locations, will be difficult to distinguish from the local rock with EDXR, although the situation might change once the variability of Lānaʻi’s adze rock is more completely known through characterization of a wider range of source locations. Even with this additional work on source locations, however, it seems likely that a two stage process will be required for a study that coherently distinguishes Lānaʻi’s sources from imports. Currently, there are several techniques that might yield information that would distinguish the local Lānaʻi’s rocks from most imports, including petrographic description of thin sections and various geochemical techniques such as WDXRF and microprobe. These more powerful techniques are all destructive in the sense that a piece of the artifact must be sacrificed to complete the analysis, are relatively expensive to undertake compared to EDXR, and typically require an experienced geologist to interpret their results.
A 14C Dates

Beta-510733
14C: 146 ± 30
13C: 22.06%

Comment: Sida cf. fallax is a short-lived material. The dated material has a highly probable association with the target event, which is fire-pit use. This short-lived material is consistently associated with use of the fire-pit feature. It provides the best estimate of when the fire-pit feature was last used. The submitted sample yielded ample carbon for dating and was processed normally in the laboratory.

Beta-510794
170 ± 30
13C: 10.46%
Sample consists of one piece of Euphorbia cf. cineslauensis twig charcoal from Site 50-40.3981, Context 15. Submitted 2018-11-26. Context 15 is described as the base of a truncated fire-pit exposed in an erosion awale. It is classified as a cultural event.

Comment: Euphorbia cf. cineslauensis is a short-lived material. The dated material has a highly probable association with the target event, which is fire-pit use. This short-lived material is consistently associated with use of the fire-pit feature. It provides the best estimate of when the fire-pit feature was last used. The submitted sample yielded ample carbon for dating and was processed normally in the laboratory.

B EDXRF Data

<table>
<thead>
<tr>
<th>Label</th>
<th>Ni</th>
<th>Cu</th>
<th>Rb</th>
<th>Sr</th>
<th>Y</th>
<th>Zr</th>
<th>Nb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context 14</td>
<td>143.298</td>
<td>138.531</td>
<td>16.689</td>
<td>342.543</td>
<td>37.728</td>
<td>128.704</td>
<td>10.772</td>
</tr>
<tr>
<td>Context 15</td>
<td>127.073</td>
<td>113.949</td>
<td>15.834</td>
<td>343.271</td>
<td>36.907</td>
<td>143.351</td>
<td>10.646</td>
</tr>
<tr>
<td>Context 16</td>
<td>169.568</td>
<td>140.242</td>
<td>37.341</td>
<td>352.212</td>
<td>24.126</td>
<td>141.784</td>
<td>10.387</td>
</tr>
<tr>
<td>Context 17</td>
<td>172.385</td>
<td>160.297</td>
<td>16.541</td>
<td>356.249</td>
<td>57.311</td>
<td>137.165</td>
<td>10.453</td>
</tr>
<tr>
<td>Context 19</td>
<td>117.062</td>
<td>89.686</td>
<td>14.488</td>
<td>350.596</td>
<td>35.178</td>
<td>139.206</td>
<td>5.72</td>
</tr>
</tbody>
</table>

Note: All data in parts per million.

Bibliography

SUPPORTING DOCUMENTATION ON CULTURAL IMPACT ASSESSMENT REQUIREMENT

APPENDIX D-4
Ka Paʻakai Analysis and Determination
MEMORANDUM

To: Keiki-Pua S. Dancil, Ph.D.
Fr: Trisha Kehaulani Watson, J.D., Ph.D.
Re: Ka Pa’akai Analysis and Determination
Date: September 17, 2021

Ka Pa’akai Analysis

Article XII, Section 7 of the Hawai’i Constitution obligates the State Land Use Commission (“LUC”) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. In order to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests, the Hawai’i Supreme Court provided the following analytical framework as an outcome of Ka Pa’akai O ka ‘aina v. Land Use Commission (94 Hawai’i 31, 7 P.3d 1068, September 11, 2000). The framework is referred to as Ka Pa’akai Analysis and consists of three parts:

1. Identify the scope of “valued cultural, historical and natural resources” in the petition area, including to the extent to which traditional and customary rights and practices are exercised in the affected area;
2. Determine the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action; and
3. Identify feasible actions, if any, that should be taken by the LUC to reasonably protect Native Hawaiian rights and practices if they are found to exist.

Pālama Lāna’i is processing an application to reclassify 200 acres from the State Land Use (“SLU”) Agricultural District into the SLU Urban District for an industrial area on the island of Lāna’i. The proposed boundary amendment is on a portion of TMK (2) 4-9-002:061. The land is adjacent to other industrial parcels such as the Lāna’i Airport, Hawaiian Electric Fossil Fuel Power Plant, and Mīkī 20-acre industrial park (see Figure 1). The existing condition of the land is former pineapple fields that have lain fallow for over 30 years.

Figure 1: Mīkī Basin Industrial Park Project Area Map, provided by Munekiyo Hiraga.

Although Honua Consulting did not complete the Archaeological Inventory Survey (“AIS”) for the Mīkī Basin 200 Acre Industrial Development (DiVito, Maly, and Dye 2018), we have reviewed the survey and have worked on multiple projects on Lāna’i for Pālama Lāna’i as the archaeological consultant. In addition, Nathan DiVito is currently employed by Honua Consulting, and Thomas Dye, Ph.D. (Principal of T.S. Dye & Associates, Archaeologist, Inc.) has provided Honua Consulting with archives of studies performed by his firm for Pālama Lāna’i since closing his business upon retirement.

Honua Consulting has reviewed the archaeological materials in the Draft Environmental Assessment (“Draft EA”) for the District Boundary Amendment Application. These materials included the following:

- Archaeological Inventory Survey (“AIS”) for the Mīkī Basin 200 Acre Industrial Development (DiVito, Maly, and Dye 2018)
There were references to gathering of ‘a’alii and ‘uhala in the project area for adornments and la’a u lapa‘au by one of the interviewees. Therefore, per the Ka Pa‘akai analysis, the first test identified cultural resources and traditional practices in the project area.

The second test considers potential impacts to these resources and practices resulting from the proposed project. Both ‘a’alii and ‘uhala are common throughout the Pālāwai-Miki Region of Lāna‘i and prevalent in the surrounding areas of the project, which is also noted by Kepā in his letter dated September 24, 2019. The project is not anticipated to affect the availability of these cultural resources and the project will not affect access to these resources in the region. Therefore, the project is not anticipated to have an impact on this practice in the ahu‘a‘a.

Both interviewees also mentioned deer hunting for subsistence. Although not a traditional cultural practice due to the lack of deer present in pre-contact Hawai‘i, it should be noted that Pālama Lāna‘i manages hunting in the area and deer is abundant in the vicinity of the project area. The project will not affect access to deer for subsistence hunting.

One of the interviewees mentioned a cave in the project area and the use as a lookout for canoes. In the AIS, the extensive research did not reveal either a cave or the use of the area as a lookout for canoes.

Due to the project’s lack of impact to traditional or customary practices, feasible action to be taken to reasonably protect Native Hawaiian rights is not required.

Recommended Determination

Based on the review of the archaeological materials provided and the additional interviews conducted, the proposed 200-acre project area is not anticipated to affect the rights customarily and traditionally exercised and does not affect or impair any Hawai‘i State Constitution, Article XII, Section 7 uses, or the feasibility of protection of those uses. We recommend that the LUC make a consistent finding of fact(s) and/or conclusion(s) of law.
Confirmation Letters for Cultural Impact Assessment and Determination
September 24, 2019
Kurt Matsumoto, COO
Pulama Lāna‘i
733 Bishop Street Suite 2000
Honolulu, HI 96813

Re: Archaeological Inventory Survey for the Miki Basin 200 Acre Industrial Development TMK (2) 4-9-002.061 (portion)
Dye, DiVito and Maly (May 9, 2018)

Mr. Matsumoto:

This letter confirms that, although not titled as such, the Archaeological Inventory Survey cited above included research compliant with guidelines for development of a cultural impact assessment study (CIA), required by the Hawai‘i Supreme Court’s holding in Ka Paakai O Ka Aina v. Land Use Commission, State of Hawai‘i, 7 P.3d 1068, 94 Hawai‘i 31 (2000).

The study includes descriptions of traditional knowledge of place, and traditional and customary practices as documented in Hawaiian language accounts from Lāna‘i. There also cited important historical accounts penned by foreign residents and visitors, documenting the changes in land use, access and residency from the 1840s to the 1950s. As a result of the rapid decline of the native Hawaiian population on Lāna‘i, and early control of nearly all the land on the island by non-native business interests, little documentation pertaining to the extent to which traditional and customary native Hawaiian rights might be exercised in the petition area survived the passing of time. No native tenant kuleana (property rights) or Royal Patent Grants were issued for lands within the petition area. By the 1870s control of the petition area lands was held under one individual, who also posted notices advising against trespass. By the 1920s, the entire area was dedicated to cultivation of pineapple (see Figure 1). Through the 1930s, the petition area included a residential field camp for Japanese employees of the plantation and their families.

Cultivation of pineapple and maintenance of support infrastructure such as road ways, water lines and stockpile sites was the only land use in the area until the close of the plantation in 1992. The Petition Area was completely cleared and cultivated in pineapple for nearly 70 years. The land was bulldozed, plowed, graded, and planted with pineapples multiple times during that period. Because of the heavy use of pesticides and growth hormones, it would have been highly unlikely that plants of medicinal or other cultural uses would have been gathered across these fields. Since the close of the pineapple plantation in 1992, a few native plant species have volunteered across the nearly 20,000 acres of former pineapple fields. Most notable are the indigenous ‘a‘ai‘i (Dodonaeae viscosa), ilima (Sida fallax), naio (Myoporum sandwicense), and the ‘ulaloa (Waltheria indica). While each of the plants have cultural value and uses, none are rare, and all grow throughout the Pālāwai-Miki Region of Lāna‘i.

September 25, 2019
Mr. Kurt Matsumoto

Figure 1. Pineapple Field Harvest in Miki Basin Fields – Miki Camp in Background (left), HAPCo Photo No. 525, August 31, 1928 (Lāna‘i Culture & Heritage Center Collection).

There was no evidence of any protected cultural practices occurring on the site. Therefore, the project will not have any significant negative impact on traditional and customary practices.

Should you have any further questions, please let me know.

‘O wau no me ka ha‘aha‘a,

Kepā Maly
P.O. Box 631500
Lāna‘i City, Hawai‘i 96720
June 26, 2020

Kurt Matsumoto, COO
Pūlama Lāna‘i
733 Bishop Street Suite 1500
Honolulu, HI 96813

Re: Cultural Impact Assessment for the Miki Basin 200 Acre Industrial Development TMX (2) 4-9-002:061 (portion) Dye, DiVito and Malý (May 9, 2018)

Mr. Matsumoto:

This letter confirms that a cultural impact assessment study (CIA) was prepared for the Miki Basin Industrial project consistent with the requirements by the Hawai‘i Supreme Court’s holding in Ka Paakai O Ka Aina v. Land Use Commission, State of Hawai‘i, 7 P.3d 1068, 94 Hawai‘i 31 (2000)

Based on the detailed ethn-historical research conducted for the ahupua‘a in which the "Miki Basin Industrial Park" project is situated and on my personal knowledge and experience, having lived on Lāna‘i and worked with elderly Hawaiian residents of Lāna‘i from the 1960’s to present day, no traditional or customary practices will be impacted by the proposed Miki Basin Industrial Park.

In fact, over the last twenty plus years, native Hawaiian and non-Hawaiian residents of Lāna‘i have provided testimony and support for development of the industrial area project as a means of promoting community sustainability and entrepreneurial opportunities.

Over the last 50 years I have been involved in many consultation interviews with elder kama‘aina from Lāna‘i who have broad knowledge of the history and issues on the island. In addition, I have interviewed several elderly residents of Miki Camp, which was in the immediate vicinity.

I have interviewed people, with both traditional and historical knowledge of Kalulu and Kaunolū ahupua‘a where the proposed Miki Basin Industrial Park is situated.

I have reviewed earlier cultural resource management studies of the area and included native resident testimonies from records of the Māhele ‘Aina, Royal Patent Grants and Boundary Commission proceedings (1848-1876), as cited in the Miki Basin report.

In the late 1980s, the community engaged in planning discussions on a wide range of topics. They sought to address concerns about protection of Lāna‘i City, land use, zoning, adaptive new uses, including shifting the industrial use of the former Machine Shop Fleet and Labor Yard, from the heart of town. The vision was to relocate heavy and light industrial uses to the area of Miki Basin, and adaptively reuse the town site as a community heritage and educational center, and also enhance small business initiatives.

The Lāna‘i Community Plan, which provides “...strategic planning goals, policies, and actions, to guide decision-making and implementation through 2030” includes, “[T]he Airport Area conceptual plan’s goals are to improve the experience of flying into Lāna‘i by improving transportation facilities, and to consolidate industrial uses.” The plan outlines:

“The existing industrial uses on Miki Road will be expanded in a proposed industrial area of approximately 200 acres, divided into approximately 100 acres each of light and heavy industrial. Light industrial uses in Lāna‘i City will also be moved and consolidated in this area. It will also serve as a staging area for shipments from the harbor to be distributed closer to town.”

“To update the Lāna‘i Community Plan, the Department of Planning’s Long Range Planning Division worked with the Lāna‘i community, stakeholders, agencies, the Lāna‘i CPAC, the Lāna‘i Planning Commission, and the County Council between 2010 and 2015.”

The Community Plan Advisory Committee members included native Hawaiian residents and a cross-section of community members including: Christine Costales, Deborah de la Cruz, Joseph Felipe, Reynold "Butch" Gima (Chair), Ernest Makaay, Matt Mano, Ron McAdams, Stanley Ruidas (Vice Chair), Alberta DeJetley, Charles Kaukeano, Jarrod Barfield, Jeffrey Balter, and Caron Green.

There were twenty three CPAC (Community Plan Advisory Committee) meetings held from January – September 2013, where the community could attend and provide testimony to shape the Community Plan. Furthermore, there were two Public Workshops held on April 4 and April 6 2013 where the community could express their opinions and hear from their neighbors regarding Island-wide, and Lāna‘i City specific issues and ideas. There were sixty two community members in attendance.

No one stated any concerns about the use of the Miki Basin site for industrial use and on one stated that there were any traditional or customary practices in this area. There was support for the industrial use in this area.

On October 22, 2018, Pūlama Lāna‘i held a Community Meeting to discuss the Miki Basin Light & Heavy Industrial Project. There were thirty seven community members in attendance.

---


4 Ordinance 4343 Bill No. 67 (2016) Draft 1 "A Bill for an Ordinance Amending Section 2.808.070, Maui County Code, to adopt the updated Lāna‘i Community Plan, page 110 of 198 in pdf, downloaded from this website link: https://www.mauicounty.gov/DocumentCenter/View/105981/2016-Lana-Community-Plan?bidId=

5 Ordinance 4343 Bill No. 67 (2016) Draft 1 "A Bill for an Ordinance Amending Section 2.808.070, Maui County Code, to adopt the updated Lāna‘i Community Plan, page 110 of 198 in pdf, downloaded from this website link: https://www.mauicounty.gov/DocumentCenter/View/105981/2016-Lana-Community-Plan?bidId=

6 Ibid at page 17 of 198.

7 Document can be downloaded here: http://mauicounty.1appscontent/uploads/2015/01/01110110Exhibit1-May-28.pdf. See section 1.1 page 12, section 1.2 page 97, and section 1.3 page 16.


9 https://www.mauicounty.gov/ArchiveCenter/ViewFileItem/17767

10 https://www.mauicounty.gov/ArchiveCenter/ViewFileItem/17962
Community members were encouraged to provide input, concerns, anticipated impacts at and following this meeting and no one stated any concerns or knowledge of any traditional and customary practices in this area. There was support for industrial use in this area.

No evidence of any protected cultural sites or practices was found in these various forms of ethno-historical documentation. Therefore, the project will not have any significant negative impact on traditional and customary practices.

Should you have any further questions, please let me know.

'O wau no me ka ha'aha'a,

Kupa'au Kukini
P.O. Box 631500
Lāna'i City, Hawai'i 96720
The table below provides additional detail about the meetings described above, including specific comments from the attendees describing their support of a consolidated industrial area in the Miki area.

Please note that the County’s minutes reflected some incorrect spelling of names, Pūlama Lānaʻi has made the correction (highlighted) for record keeping. For your reference, we have also underlined individuals with Hawaiian ancestry. Only Matt Mano and Stacie Koanui Nefelar and Kaulana Kahoʻolahala are representative of multi-generational Hawaiian families of Lānaʻi.

<table>
<thead>
<tr>
<th>Meeting Name</th>
<th>Date</th>
<th>Attendees</th>
<th>Notes</th>
<th>Link</th>
</tr>
</thead>
</table>
| Lānaʻi CPAC Mtg. 1   | 1/9/2013 | **Community Plan Advisory Committee**
                      | Chris Costales, Deborah Yooko de la Cruz, Joe
                      | Felipe, Butch Gima, Ernest Magaoay, **Matt Mano**,  
                      | Ron McOmber, Stan Ruidas, **Alberta DeJetley**,  
                      | Charles Kaukeane, Jarrod Barfield, Caron Green
                      | **County of Maui - Planning Department**
                      | Will Spence, Director, Kathleen Kern, Long-Range Planning, 
                      | Mary Jorgensen, Long-Range Planning, 
                      | David Yamashita, Long-Range Planning
                      | **County of Maui - Corp Counsel**
                      | Mike Hopper
                      | **Consultants**
                      | Jen Maydan, Chris Hart & Partners
                      | **Public**
                      | Carolyn and Walter Triber, John Ornellas, Christie
                      | Costales, Robin Kaye, Kurt Matsumoto, Sally
                      | Kaye, Chet Zoll, Joseph Felipe, **Donovan Kealoha**,  
                      | **Stacie Koanui Nefelar**, Chris Lovvorn, Pat
                      | Drennan, Ed Jensen, Andrea de la Cruz, **Bradford Oshiro**, Pat Reilly | “Kathleen Kern asked each member to identify the top issues/problems facing Lānaʻi.” (Page 5 of 8)  
|                      |       | “Alberta:  
                      | • Lack of light industrial space, including storage space for small businesses” (Page 6 of 8) | https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/17640 |
| Lānaʻi CPAC Mtg. 3 | 1/23/2013 | **Community Plan Advisory Committee**  
Chris Costales, Deborah Yoko de la Cruz, Joe Felipe, Butch Gima, Caron Green, Matt Mano, Ron McOmber, Stan Ruidas, Alberta DeJetley, Charles Kaukeano.  
**County of Maui - Planning Department**  
David Yamashita, Long-Range Planning, Kathleen Kern, Long-Range Planning  
Mary Jorgensen, Long-Range Planning  
**Consultants**  
Jen Maydan, Chris Hart & Partners  
**Public**  
Lisa Kaniho, David Green, David Tanoue, Kurt Matsumoto, Pat Reilly, Carolyn & Walter Triber, Steven Luliti, David Embrey, Pam Alconcel, Nancy Rajaei, Michelle Fujie, Jason Gill, David Gardner, Sue Murray, Henry Clay Richardson, Sally & Jim Clemens, Kathy & Stu Marlow, Ron Gingerich, John Stubbart, Doug Williams, Natasha Inaba, Don Jackson, Judith Stilgenbauer, Mark Sacco, Chris Andrus, Jessica Smith, Anthony Pacheco, Sherri Williams, Simon Seisho Tajiri | “Joe supports the idea of moving the industrial area to Miki Basin and creating a museum at the labor/base yard.” (Page 7 of 9) | https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/17642 |
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Participants</th>
<th>Notes</th>
<th>URL</th>
</tr>
</thead>
</table>
| Lāna‘i CPAC Mtg. 4                        | 6-Feb-13        | **Community Plan Advisory Committee**
Chris Costales, Deborah de la Cruz, Ernest Magaoay, Butch Gima, Caron Green, Matt Mano, Ron McOmber, Stan Ruidas, Alberta DeJetley, Charles Kaukeano  | “He noted that if the community is going to have opportunities to have businesses then they will need land. All the community got is hotels and they didn’t get the light industrial land.” (Page 4 or 8) | https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/17660 |
|                                           |                 | **County of Maui - Planning Department**
David Yamashita, Long-Range Planning
Kathleen Kern, Long-Range Planning
Mary Jorgensen, Long-Range Planning
Doug Miller, Long-Range Planning |                                           |                                                                             |
|                                           |                 | **Consultants**
Jen Maydan, Chris Hart & Partners |                                           |                                                                             |
|                                           |                 | **Public**
Pat Reilly, Sue Murray, Wallace Stalker, Diane Preza, Roselani Kaho‘olahala, Kaulana
Kaho‘olahala, Simon Tajiri, Charlotte Menze, Michael Hurte, Nicholas E. Palumbo II, Mark Sacco, Henry Clay Richardson, Elaine Londereur, Robin Kaye, Keoki Kerr, Chester Koga |                                           |                                                                             |
| Lāna’i CPAC Mtg. 10 | 24-Apr-13 | **Community Plan Advisory Committee Attendees**  
Chris Costales, Deborah de la Cruz, Butch Gima, Caron Green, Ron McOmber, Alberta Dejetley, Stan Ruidas  
**County of Maui - Planning Department Attendees**  
Kathleen Kern, Long-Range Planning  
Mary Jorgensen, Long-Range Planning  
Doug Miller, Long-Range Planning  
**Public Attendees** Winnie Basques, Dave Green, Kepa Maly, Lynn McCrory, Melani Aki, Howard MacNair, Donna MacNair, Alan Chun, Tom Hoen, Chester Koga, David Tano, John Stubbart, Charlie Palumbo, Ron Gingerich, Judi Riley, Bridgette Beatty, Linda Morgan, Natasha Inaba, Joelle Aoke, Kanish Tulbera, Bryan Jacalne, Sadie Schilling, Alicia Ebbing, Michelle Fujiie | “Mary presented a brief summary of the April 4th Island-wide Public Workshop that was attended by 62 people. A summary table for housing types and density per acre showed the highest preference was for 2-4 unit buildings such as single family with ohana, duplex, multi-generational (more than one kitchen), or four-plex. A summary table for recreational references by location showed high scores for forest restoration, historical site visits and restoration. Finally Mary reviewed three maps from the April 4th Public Workshop that the public drew locations for, and commented on, preferred future development alternatives. Ron asked when the CPAC will see a complete summary of the workshop results. Mary replied that a summary will be posted on the website once it is completed.” (Page 2 of 4)  
“Mary encouraged the CPAC members to draw on the base map the locations of new growth areas and note what type of development they would like to see in these areas.” (Page 3 of 4)  
“Alberta said that the State does not want to see any farms within a one mile radius around the airport.” (Page 3 of 4) | https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/17962 |
| Lānaʻi CPAC Mtg. 12 | 22-May-13 | “The CPAC also requested to see the proposed footprint of the 200 acres of light and heavy industrial lands.” (Page 2 of 2)  
“Motion: Support the concept of adding 100 acres of light industrial and 100 acres of heavy industrial land in the Miki Basin. Passed -All were in favor.” (Page 2 of 2) | https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/18022 |
Interview with Laʻikealoha Hanog
Interview with La’ikealoha Hanog

Interviewer: Matthew Sproat
Interviewee: La’ikealoha Hanog
Date: August 21, 2021
Location: via phone

Biography
Ms. Hanog works in food and beverage service for Hale o Manele (Trilogy Wedding and Event) on the island of Lāna‘i. She was born on the island of Maui and raised on Lāna‘i, where she still lives.

Overview
As a seventh-generation family of Lāna‘i, Ms. Hanog possesses a robust knowledge base of the project area’s environment and relevance to traditions and customs. She recounted the various plants and animals known to the project area as well as associated traditions and customs. Ms. Hanog expressed her concerns regarding the myriad impacts to access and habitat that the project would create.

General Discussion
Ms. Hanog is associated with the project area through collecting and harvesting. She uses some of the plants that are known to be in the project area’s region. Most recently, she and other practitioners go to the area to collect native Hawaiian plants. The plants are used for medicinal purposes, adornments, and gifts.

When asked about freshwater aquifers in the project area, Ms. Hanog explained that there are aquifers at various places across the island, but that the wells are located further mauka of the project area.

Ms. Hanog could not recount any cultural stories associated with the project area. However, in her personal narrative, she recounted that she and her family would use the area for traditional gathering.

Cultural Resources
Ms. Hanog explained the various flora that are in the project area and their uses. ‘A‘ali‘i is used for adornments. ‘Uhaloa is found here and used for medicinal purposes. There is also ilima and lantana. Regarding fauna, Ms. Hanog mentioned she had seen pueo recently, and noted that it has been a long time since she had seen them. She also noted that there are deer, pheasants, and quail in the area. She mentioned that during her grandparents’ time, pheasants were abundant. Unfortunately, now they are more scarce.

Traditions and Customs
Ms. Hanog uses the project area to gather plants for traditional medicine and adornments. She made special mention that she uses the area to gather plants primarily because of access. It is easier to gather plants in this area as opposed to the eastern shoreline or Manele bay. Ms. Hanog also noted that her husband is a hunter, and harvests deer in the area to feed her family and other members of the community. Due to the remote geography of Lāna‘i, gathering and hunting are inextricably tied to livelihood and subsistence.

Impacts
First, Ms. Hanog explained that the project could impact access to the area to collect culturally important plants. The buildings and footprint of the project may impact plant life, as well as the associated traffic the project would create. The project could also affect the deer population in the area, which her husband harvests via archery. Ms. Hanog also noted that the project would disrupt the habitat and nesting grounds of birds such as pueo and pheasant.

Second, Ms. Hanog noted that more broadly, there are concerns about projects which are designed to bring more people to Lāna‘i. With no free-flowing surface water on Lāna‘i, there are real concerns of how further development will affect water resources and the environment more broadly.

Ms. Hanog is not aware of any iwi in the area, however she did mention that there are burials (including her ‘ohana) mauka of the project area.

Mitigation Measures & Recommendations
Ms. Hanog said that she would prefer the project not go through. If the project does proceed, she hopes that there is something in writing to ensure protection and health of native plants. Regarding the native fauna, she hopes the project would be mindful of their habitat (including deer). The deer are already stressed due to the dry weather.

Ms. Hanog recommended that resources of Lāna‘i be made a priority, and to focus on the projects and developments that are already underway and causing impacts. She noted that the population of Lāna‘i has increased and raised concerns that the resources cannot sustain a growing population.
Interview with Kumu Hula Pualani Kauila
Interview with Kumu Hula Pualani Kauila

Interviewer: Matthew Sproat
Interviewee: Pua Kauila
Date: August 19, 2021
Location: via phone

Biography
Ms. Kauila is a retired educator of Hawaiian Studies at the University of Hawai‘i, Mānoa. She was born and raised on the island of Lāna‘i, at Kō‘ele Ranch. When she was born, her grandfather was the head wrangler for Kō‘ele Ranch. Her father and uncles were also workers on the ranch. At the age of 6, she left Lāna‘i and moved to Maui, but spent her summers working on Lāna‘i. She currently lives in Honolulu. She is a Kumu Hula and cultural practitioner.

Overview
Ms. Kauila is associated with the project area through her personal narrative. She possesses a robust knowledge about Lāna‘i, its history, and its people. Overarchingy, she is concerned that the project will further develop Lāna‘i at the expense of its long-time residents who have called Lāna‘i home for generations.

General Discussion
Ms. Kauila explained the modern history of Lāna‘i, which was used as cattle ranchland for the people of Maui, Moloka‘i, and Lāna‘i, before the pineapple industry purchased 90% of the island. During ranch times, the project area near the airport was known as the “piggery”.

Ms. Kauila noted that Hawaiians lived on ocean land, which is why those areas today are not developed; these lands were passed down through inheritance or were old kuleana lands. She also explained that because the island is so small, and given its history, the people of Lāna‘i are very closed to new things happening.

Cultural Resources
Ms. Kauila explained that, according to the oral traditions of when Lāna‘i was inhabited by ghosts, there was a cave in the project area (facing the ocean side). This was where Kauula‘au stayed. In this cave, which opens and closes to certain people, are remnants of cultural artifacts including canoes, ipu, and capes.

Regarding flora and fauna, Ms. Kauila noted that pueo are very well known in the area. She sees them often when she returns home. She could not identify any native plants in the area but noted that she would have to refer the interviewer to another individual.

Traditions and Customs
Ms. Kauila explained that hunters use the area to hunt axis deer for their own subsistence. Historically, she noted that the area was used as a look-out to see when other canoes were approaching the island.

Impacts

Ms. Kauila explained that the people of Lāna‘i will be opposed to any industrial or commercial areas built on the land. She noted the negative impact of visitors on the island. Because the island is so small, any further development will negatively impact the island itself. She raised questions such as: would the development deface the island? Would it impact the people coming in to hunt? She firmly believes an industrial area will limit what that side of the island can access, whether for hunting or agricultural purposes.

Mitigation Measures & Recommendations
Ms. Kauila said that there must be community engagement. Everyone must be able to voice their opinions. Her recommendation is to have the local community drive the process.
PHASE I
ENVIRONMENTAL SITE ASSESSMENT

Miki Basin
200 Acre Property
Proposed Industrial Area
Miki Road
(SE of Existing Airport Runway)
Lanai City, Hawaii

April 3, 2014
TRC Project No: 215880

Prepared For:
Lanai Resorts, LLC
733 Bishop Street, Suite 2000
Pacific Guardian Center – Makai Tower
Honolulu, Hawaii 96813
(808) 728-4111
(808) 638-5649

Prepared By:
TRC – 677 Ala Moana Blvd., Suite 920
Honolulu, Hawaii 96813
(808) 728-4111
(808) 638-5649

Ron Landolt
Project Coordinator
TRC Environmental Professional

Kacey Swindle
Industrial Hygienist

Phase I Environmental Site Assessment Report
Miki Basin – 200 Acre Property, Proposed Industrial Area, Lanai City, HI

April 3, 2014

TABLE OF CONTENTS

EXECUTIVE SUMMARY ......................................................................................... 1
1.0 INTRODUCTION ............................................................................................... 3
  1.1 PURPOSE AND SCOPE OF SERVICES ......................................................... 3
  1.2 ADDITIONAL SERVICES ............................................................................. 4
  1.3 LIMITATIONS AND DEVIATIONS ............................................................... 4
    1.3.1 Accuracy and Completeness ................................................................. 4
    1.3.2 Warranties and Representations ......................................................... 5
    1.3.3 Continued Validity/User Reliance ....................................................... 5
    1.3.4 Deviations to ASTM E 1527-13 Standard ........................................ 6
    1.3.5 Significant Assumptions .................................................................... 6

2.0 SITE DESCRIPTION ........................................................................................ 7
  2.1 SITE LOCATION AND LEGAL DESCRIPTION ......................................... 7
  2.2 SITE IMPROVEMENTS ............................................................................. 7
  2.3 CURRENT AND HISTORICAL SITE USE ............................................... 7
      2.3.1 Current Site Use(s) ........................................................................... 7
      2.3.2 Previous Owner and Operator Information ..................................... 7
  2.4 PHYSICAL SETTING ................................................................................. 7

3.0 USER PROVIDED INFORMATION .................................................................. 9
  3.1 TITLE & JUDICIAL RECORDS FOR ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS ........................................................................... 9
  3.2 SPECIALIZED KNOWLEDGE .................................................................. 9
  3.3 PROPERTY VALUE REDUCTION ISSUES .............................................. 9
  3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION ................................................................. 9
  3.5 REASON FOR CONDUCTING PHASE I ................................................... 9

4.0 RECORDS REVIEW .................................................................................... 10
  4.1 SOURCES OF INFORMATION ................................................................ 10
  4.2 HISTORICAL USE INFORMATION ........................................................... 10
      4.2.1 Site History ...................................................................................... 10
      4.2.2 Adjoining Property and Surrounding Property History ................. 11
  4.3 DATABASE REPORT ............................................................................... 11
  4.4 PREVIOUS REPORTS ............................................................................... 13
  4.5 OTHER ENVIRONMENTAL RECORD SOURCES ................................... 13

5.0 SITE RECONNAISSANCE .......................................................................... 15
  5.1 METHODOLOGY AND LIMITING CONDITIONS ................................... 15
  5.2 INTERIOR AND EXTERIOR SITE OBSERVATIONS ................................ 15
      5.2.1 Hazardous Substances .................................................................. 16
  5.3 ADJOINING AND SURROUNDING PROPERTIES RECONNAISSANCE ....................................................................................... 16
       5.3.1 Adjoining Properties ..................................................................... 16
       5.3.2 Surrounding Properties ................................................................. 16

215880

FEA REF-423
EXECUTIVE SUMMARY

Subject to the qualifications and limitations stated in Section 1 of this report, TRC Environmental Corporation (TRC) was retained by Lanai Resorts, LLC to perform a Phase I Environmental Site Assessment (ESA) of approximately 200 acres of undeveloped land primarily located on the west side of Miki Road with approximately 35 of the 200 acres located on the east side of Miki Road. The Site is three and a half miles east of the Pacific Ocean and begins approximately 0.7 miles south of Kaunahalau Highway in Lanai City, Maui County, Hawaii (herein referred to as the "Site"). TRC’s assessment was conducted in connection with the Clients’ planned renovation of the Site to include light and heavy industrial areas. 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 Practice E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13). Limitations and/or deviations from the ASTM E 1527-13 standard are described in Section 1.3 of this report.

The Site is currently undeveloped land.

No transformers were observed on the Site. Utility owned pole-mounted transformers are located adjacent to the property area. It is unknown if the transformers may contain polychlorinated biphenyls (PCBs).

Based on information obtained from the site reconnaissance and available information, no underground storage tanks (USTs) or above ground storage tanks (ASTs) are located on the Site.

Freedom of Information Act (FOIA) record reviews were completed by TRC of Hawaii Department of Health’s (DOH) available records. DOH records did not indicate any concerns associated with the Site.

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 the current Site representative; and TRC’s professional judgment, no recognized environmental conditions (RECs) associated with the Site, as defined by the ASTM E 1527-13 standard, were identified.

However, potential Vapor Encroachment Conditions (VECs) were identified with respect to the permanently out of use underground storage tank (UST) listing for the nearby Lanai Airport and the following listings for the Maui Electric Company (MECO) facility: Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (CESQG), Toxic Chemical Release Inventory System (TRIS), PCB Activity Database System (PADS) and SPILLS. As such, vapor encroachment onto the Site from this adjacent property could be a possibility, and based on Clients perceived risk, liability and/or corporate policy, may warrant further investigation; however, based on the lack of reported releases and/or associated regulatory status, the Lanai Airport UST and MECO facility identified as VECs have not likely caused a vapor encroachment onto the Site.
1.0 INTRODUCTION

TRC has prepared this Phase I ESA for Lanai Resorts, LLC (hereinafter “Clients” or “Users”).

This report was prepared for and may be relied upon by Clients for the purposes set forth herein; it may not be relied on by any party other than the Clients 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 Clients. 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 Site identified as Miki Basin – Proposed Industrial Area 200 Acre Property primarily located on the west side of Miki Road with approximately 35 of the 200 acres located on the east side of Miki Road. The Site is approximately three and a half miles east of the Pacific Ocean and begins approximately 0.7 miles south of Kaumualapau Highway in Lanai City, Maui County, Hawaii (hereinafter 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 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 Clients/Users. TRC was authorized to perform this assessment by signed proposal dated February 26, 2014, from Mr. Thomas A. Hoen of Lanai Resorts, LLC (Clients).

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 Users to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations pursuant to Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting all appropriate inquiry 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 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 requested by the Users; and
• Preparation of a report summarizing findings, opinions and conclusions.

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:

- Asbestos
- 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 including vapor intrusion
- Biological agents
- Mold

1.3 Limitations and Deviations

1.3.1 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 five years is not required.

The Clients are advised that the Phase I ESA conducted at the Site is a limited inquiry 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 limitations 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 observation, 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.

1.3.2 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 Clients-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.

1.3.3 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 Clients obtain specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Clients are notified by TRC that it has obtained specific information that may
materials alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is assumed 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.

1.3.4 Deviations to ASTM E 1527-13 Standard

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

1.3.5 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 Users 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.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The Site is identified as portion of Tax Lot 4-9-002:001 and consists of approximately 200 acres of undeveloped land primarily located on the west side of Miki Road with approximately 35 of the 200 acres located on the east side of Miki Road. The Site is approximately three and a half miles east of the Pacific Ocean and begins approximately 0.7 miles south of Kaumalapau Highway in Lanai City, Maui County, Hawaii. The Site is currently owned by Lanai Resorts, LLC. A Site location map is included as Figure 1.

2.2 Site Improvements

Current on-site improvements are listed in the following table.

<table>
<thead>
<tr>
<th>Site Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building (stories)</td>
<td>None</td>
</tr>
<tr>
<td>Construction date</td>
<td>N/A</td>
</tr>
<tr>
<td>Exterior areas</td>
<td>N/A</td>
</tr>
<tr>
<td>On-site roads/rail lines</td>
<td>Miki Road</td>
</tr>
<tr>
<td>Other large equipment</td>
<td>Utility owned and operated pole-mounted transformers were located adjacent to the property. The transformers were either not accessible or not labeled, and it is unknown if the transformers may contain PCBs.</td>
</tr>
<tr>
<td>Portable water supply</td>
<td>N/A</td>
</tr>
<tr>
<td>Sewage disposal system</td>
<td>N/A</td>
</tr>
<tr>
<td>Heating/Cooling System</td>
<td>N/A</td>
</tr>
<tr>
<td>Back-Up fuel source</td>
<td>N/A</td>
</tr>
<tr>
<td>Electricity supplier</td>
<td>Property doesn't currently have service; however, Maui Electric Company serves the entire island.</td>
</tr>
<tr>
<td>Storm water system</td>
<td>Runoff</td>
</tr>
</tbody>
</table>

2.3 Current and Historical Site Use

2.3.1 Current Site Use(s)

The Site is currently undeveloped.

2.3.2 Previous Owner and Operator Information

The Site is believed to have always been undeveloped and utilized for agricultural purposes associated with the island’s pineapple plantation.

2.4 Physical Setting

According to the United States Geological Survey (USGS) topographic map, Lanai City, HI quadrangle dated 1992, the Site is located approximately three and a half miles to the east of the
Phase I Environmental Site Assessment Report
MiKi Basin – 200 Acre Property, Proposed Industrial Area, Lanai City, HI
April 3, 2014

Pacific Ocean, the Site topographic elevation is approximately 1,247 feet above mean sea level (MSL), and local topography slopes to the west-southwest. Based on local topography and historical environmental reports provided to TRC, as applicable, the assumed direction of shallow ground water flow is to the west-southwest towards the Pacific Ocean. However, a subsurface investigation would be required to determine actual ground water flow direction.

The database radius report supplied by Environmental Data Resources, Inc. (EDR) of Shelton, 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: Silty Clay Loam
- Soil Component Name: Molokai
- Deeper Soil Types: Molokai Silty Clay Loam

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 E.

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: reviewing title records for environmental liens or activity and land use limitations; providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); and providing explanations for significant reduction in the Site purchase price. A list of requested information was included in TRC’s proposal date and executed February 26, 2014 (see Section 1.1). The information was provided by the User on March 20, 2014 and is included in Appendix B.

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 requested by the User.

The environmental lien and AUL search report supplied by EDR of Shelton, Connecticut indicated environmental liens and AULs were not found for the Site and a copy of the EDR search report is included in Appendix C.

3.2 Specialized Knowledge

The User did not provide any specialized knowledge related to potential RECs at the Site.

3.3 Property Value Reduction Issues

The User did not provide any 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. Thomas A. Hoen of Lanai Resorts, LLC. 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

TRC understands that the Users require a Phase I ESA as part of a study to pursue land use approval to use the land as an industrial park. According to the Users, the land is currently zoned as agricultural.
4.0 RECORDS REVIEW

4.1 Sources of Information

Information regarding Site and vicinity historical uses was obtained from various publicly available and practically reviewable sources including: aerial photographs; topographic maps; city directories; local municipal records; an environmental database report; and interviews with Site representative(s) and regulatory agency official(s), as necessary. The historical documents were obtained from Environmental Data Resources (EDR) and are included in Appendix C.

4.2 Historical Use Information

Historical use information regarding the Site and surrounding properties was obtained from available municipal records as well as aerial photographs (scale: 1" = 750') dated 1952; aerial photographs (scale: 1" = 500') dated 1992; topographic maps dated 1984 and 1992; and city directories from 1997, 1999 and 2103.

4.2.1 Site History

Operational History

<table>
<thead>
<tr>
<th>Year</th>
<th>Site History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 – Present</td>
<td>Lanai City was reportedly first developed in the early 1920's. The Site appears undeveloped.</td>
</tr>
</tbody>
</table>

It does not appear that topographic contours in the Site area have significantly changed during the time period reviewed.

Hazardous Substances

No hazardous substances or petroleum products were observed at the Site during the Site reconnaissance.

4.2.2 Adjoining Property and Surrounding Property History

<table>
<thead>
<tr>
<th>Year</th>
<th>Adjoining Property History</th>
</tr>
</thead>
<tbody>
<tr>
<td>1903 – Present</td>
<td>Review of historic aerial photographs and topographic maps depict the area to the northwest of the site as area property used for the Lanai Airport. A storage warehouse structure is reportedly developed to the west of Miki Road to the east of the Site in 1977. All other areas surrounding the Site are depicted as undeveloped land utilized for agricultural and pineapple plantation activities.</td>
</tr>
<tr>
<td>1977 – 1992</td>
<td>Review of historic aerial photographs and topographic maps depict the area to the northwest of the site as area property used for the Lanai Airport. All other areas surrounding the Site are depicted as undeveloped land utilized for agricultural and pineapple plantation activities.</td>
</tr>
<tr>
<td>1952 – 1976</td>
<td>Review of historic aerial photographs and topographic maps depict the area to the northwest of the site as area property used for the Lanai Airport. All other areas surrounding the Site are depicted as undeveloped land utilized for agricultural and pineapple plantation activities.</td>
</tr>
<tr>
<td>1920 – 1952</td>
<td>Lanai City was reportedly first developed in the early 1920's. The Site appears undeveloped.</td>
</tr>
</tbody>
</table>

4.3 Database Report

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 21 properties/listings. These properties included those that could be mapped and those that could not (i.e., orphan properties).

Subject Site

The Site was not identified within any of the databases searched with the identified ASTM-required radii of the Site.

Adjacent and Surrounding Properties

TRC evaluated the following factors to determine whether additional environmental records with respect to the adjoining and/or surrounding properties should be reviewed:

1. Whether the property is up-gradient or down-gradient of the Site based on the local topography and the assumed south-southwest shallow ground water flow direction;
2. Property case status (e.g., whether the Hawaii Department of Health has issued a No Further Action letter, etc.);
3. Type of database and whether the presence of contamination is known; and
4. The distance between the listed property and the Site.
In addition, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. § 9601(22) defines a "release" as "any spillage, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances or pollutant or contaminant)." According to CERCLA, the term "environment" includes (A) the navigable waters, the waters of the contiguous zone, and the ocean waters...and (B) any other surface water, groundwater, drinking water supply, land surface or subsurface strata..."
Given that CERCLA and the All Appropriate Inquiries Final Rule 40 CFR Part 312 do not differentiate by form (e.g., solid, liquid, vapor) of the release to the environment, Section 2.1 of ASTM E1527 Standard indicates that, "Vapor migration must be considered no differently than contaminated groundwater migration in the Phase I investigation." Vapor intrusion generally occurs when there is a migration of volatile chemicals from contaminated groundwater or soil into an overlying building. Volatile chemicals can emit vapors that may migrate through subsurface soils and into indoor air spaces of overlying buildings. Volatile chemicals may include volatile organic compounds, select semivolatile organic compounds, and some inorganic analytes. In accordance with ASTM E2600 - 10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, listings for potential volatile organic compounds (VOC) impacted properties located within 1760-foot radius of the Site and listings for potential petroleum-impacted properties located with a 520-foot radius of the Site were reviewed as a component of this investigation. Potential Vapor Encroachment Conditions (VECs) were identified for properties located within the referenced radii.

Based on this evaluation, TEC 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.

<table>
<thead>
<tr>
<th>Facility Name and/or Address</th>
<th>Lanai Airport – Lanai City, HI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Location Relative to Site</td>
<td>0.400 miles to the northwest</td>
</tr>
<tr>
<td>EDR Map No.</td>
<td>1</td>
</tr>
<tr>
<td>Databases</td>
<td>UST</td>
</tr>
<tr>
<td>Description/ID Number</td>
<td>U803222164</td>
</tr>
<tr>
<td>Presumed Hydrogeologic Setting</td>
<td>Up-gradient</td>
</tr>
<tr>
<td>Database Review Summary</td>
<td>This property had one UST that was reportedly closed in 1994 and currently listed as Permanently Out of Use. This facility is within the 520-foot radius for potential petroleum-impacted properties and is within the 1760-foot radius for potential VOC-impacted properties and meets the definition of a VEC based on ASTM 2600 – 10. However, based on the current regulatory status, it is not expected that vapor migration is presently a concern to the Site.</td>
</tr>
</tbody>
</table>

According to the regulatory database report, EDR did not identify any historical auto stations (i.e., gasoline stations, filling stations, automobile repair shops, auto service stations, etc.) or historical cleaners (e.g., dry cleaners, laundromats, laundry services, wash & dry establishments, etc.) within ¼ of a mile of the Site.

4.4 Previous Reports

No environmental reports related to the Site were provided to TRC for review and inclusion into this report.

4.5 Other Environmental Record Sources

Per the ASTM standard, local or additional state records were reviewed to enhance and supplement the ASTM-required federal and state records reviewed and discussed earlier in this report. Local sources that were contacted to obtain this information include: the Hawaii Department of Health, the Lanai Fire Station, the Maui County Tax Assessor, and the Maui County Department of Environmental Management. Information from these sources is discussed below:

<table>
<thead>
<tr>
<th>Source</th>
<th>Available Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii Department of Health</td>
<td>According to information provided via online public records, the Hawaii Department of Health does not appear to have any records pertaining to the Site.</td>
</tr>
</tbody>
</table>
5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Ms. Kacey Swindle and Mr. Ron Landolt conducted a Site reconnaissance of accessible areas on and around the Site on March 11, 2014, for the purpose of identifying potential RECs, and were unaccompanied during the Site reconnaissance. Photographs taken during the reconnaissance are provided in Appendix D.

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>
<thead>
<tr>
<th>Item</th>
<th>Present (Yes/No)</th>
<th>Historic/No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous material storage or handling areas</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboveground storage tanks (ASTs) and associated piping</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underground storage tanks (USTs) and associated piping</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drums &amp; containers (&lt;5 gallons)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odors</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polychlorinated Biphenyls (PCBs) / Transformers</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stain or corrosion</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drains &amp; sumps</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pits, ponds &amp; lagoons</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stressed vegetation</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historic fill or any other fill material</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste water (including storm water or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Septic systems or cesspools</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2.1 Hazardous Substances

Hazardous substances and petroleum products were not observed at the Site during the Site reconnaissance.

5.3 Adjoining and Surrounding Properties Reconnaissance

5.3.1 Adjoining Properties

<table>
<thead>
<tr>
<th>Direction from Site</th>
<th>Current Land Use Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Undeveloped land with Kaumalapau Highway beyond</td>
</tr>
<tr>
<td>East</td>
<td>MECO Power Plant Facility and the storage warehouse, metal scrapyard and Maui disposal Sites are located to the east of the Site property boundary along with Miki Road followed by undeveloped land</td>
</tr>
<tr>
<td>South</td>
<td>Undeveloped land</td>
</tr>
<tr>
<td>West</td>
<td>Undeveloped land with the Lanai City Airport to the northwest</td>
</tr>
</tbody>
</table>

TRC observed one 55 gallon metal drum partially filled with gasoline, one 55 gallon plastic drum partially filled with oil and one 5 gallon bucket with an unknown material located on a wooden pallet in an unsecured plastic truck bed liner in the metal scrapyard area located on the existing industrial facility owned and operated by Lanai Resorts, LLC to the east of the Site and south of the MECO facility. Reportedly these materials were in the process of being removed from the site, and TRC did not observe any evidence of spills or releases associated with the materials.

5.3.2 Surrounding Properties

The local setting is predominantly undeveloped land with the exception of the MECO Plant and the existing Lanai Resorts, LLC industrial facility between the Site and Miki Road as well as the Lanai City airport to the northwest of the Site.

6.0 INTERVIEWS

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

- Mr. Thomas A. Hoen of Lanai Resorts, LLC – Director of Development and Construction
- Mr. Wayne Ishizaki of Lanai Resorts, LLC – Site Contact
- Mr. Todd McDonald of Lanai Fire Department - Chief

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

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

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

Mr. McDonald 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.
7.0 FINDINGS, OPINIONS AND CONCLUSIONS

Potential findings can include RECs, historical RECs (HRECs), 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 on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do 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.

HRECs are defined as an environmental condition which in the past would have been considered a REC, but which may or may not be considered a REC currently.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 at the 200 acre property located on the west side of Miki Road with approximately 55 of the 200 acres located on the east side of Miki Road in Lanai City, Maui County, Hawaii (Site); see Appendices F and G. Deviations from this practice are described in Section 1.3 of this report.

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

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

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). TRC did not identify any data gaps during this assessment.

8.0 REFERENCES

<table>
<thead>
<tr>
<th>Description/Title of document(s) received or agency contacted</th>
<th>Date Information requested (fill in date of agency contact)</th>
<th>Information Updated</th>
<th>Reference source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Data Resources</td>
<td>March 10, 2014</td>
<td>N/A</td>
<td><a href="http://www.adpnt.com/">http://www.adpnt.com/</a></td>
</tr>
<tr>
<td>Hawaii Department of Health</td>
<td>March 10, 2014</td>
<td>N/A</td>
<td><a href="http://health.hawaii.gov/">http://health.hawaii.gov/</a></td>
</tr>
<tr>
<td>Maui County Fire Department</td>
<td>March 11, 2014</td>
<td>N/A</td>
<td>Chief Ted McDonald via in person interview</td>
</tr>
<tr>
<td>Maui County – Assurance, Planning, Environmental Management</td>
<td>March 12, 2014</td>
<td>N/A</td>
<td>http://www.co.mau_hi.us</td>
</tr>
</tbody>
</table>
9.0 ADDITIONAL SERVICES

No additional services were performed for the Site during this Phase I ESA.
APPENDIX A

DATABASE RADIUS REPORT

Mikl Basin - 200 Acre Industrial Site
Miki Road & Kaumalapau Highway
Lanai City, HI 96763

Inquiry Number: 3R75991 24
March 19, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR Environmental Data Resources Inc

6 Armorino Road, 4th floor
Shelton, CT 06484
Tel: 1-800-352-0050
www.edrnet.com
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>E81</td>
</tr>
<tr>
<td>Overview Map</td>
<td>2</td>
</tr>
<tr>
<td>Detail Map</td>
<td>3</td>
</tr>
<tr>
<td>Map Findings Summary</td>
<td>4</td>
</tr>
<tr>
<td>Map Findings</td>
<td>7</td>
</tr>
<tr>
<td>Orphan Summary</td>
<td>8</td>
</tr>
<tr>
<td>Government Records Searched/Data Currency Tracking</td>
<td>GR-1</td>
</tr>
<tr>
<td>GECHECK ADDENDUM</td>
<td></td>
</tr>
<tr>
<td>Physical Setting Source Addendum</td>
<td>A-1</td>
</tr>
<tr>
<td>Physical Setting Source Summary</td>
<td>A-2</td>
</tr>
<tr>
<td>Physical Setting SSURGO Soil Map</td>
<td>A-9</td>
</tr>
<tr>
<td>Physical Setting Source Map</td>
<td>A-11</td>
</tr>
<tr>
<td>Physical Setting Source Map Findings</td>
<td>A-13</td>
</tr>
<tr>
<td>Physical Setting Source Records Searched</td>
<td>A-9</td>
</tr>
</tbody>
</table>

---

**Thank you for your business.**

Please contact EDR at 1-800-352-0050 with any questions or comments.

---

## 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**

M90 ROHO & KAULALAPAU HIGHWAY
LANAI CITY, HI 96763

**COORDINATES**

<table>
<thead>
<tr>
<th>Latitude (North)</th>
<th>Longitude (West)</th>
<th>UTM X (Meters)</th>
<th>UTM Y (Meters)</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.7904000</td>
<td>156.9375000</td>
<td>714698.2</td>
<td>2380187.0</td>
<td>1247 ft</td>
</tr>
</tbody>
</table>

**USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY**

<table>
<thead>
<tr>
<th>Target Property Map</th>
<th>Not reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Recent Revision</td>
<td>Not reported</td>
</tr>
</tbody>
</table>

### 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
- Proposed NPL site list
- NPL LIENS
- Federal Depleted NPL site list
- Deleted NPL site list

---

TC3076991.2a Page 1
EXECUTIVE SUMMARY

Federal CERCLIS list
CERCLIS,.......... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY,.......... Federal Facility Site Information Listing

Federal CERCLIS NFRAP site list
CERC-NFRAP,.......... CERCLIS No Further Remedial Action Planned

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
US ENG CONTROLS,...... Engineering Controls Sites List
US INST CONTROL,...... Sites with Institutional Controls
LUCIS,................. Land Use Control Information System

Federal ERNS list
ERNS,................... Emergency Response Notification System

State and tribal - equivalent CERCLIS
SHWS,................. Sites List

State and tribal landfill and/or solid waste disposal site lists
SWF/ELF,.............. Permitted Landfills in the State of Hawaii

State and tribal leaking storage tank lists
LUST,.................. Leaking Underground Storage Tank Database
INDIAN LUST,......... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists
INDIAN UST,.......... Underground Storage Tanks on Indian Land
FEMA UST,............. Underground storage tank listing

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
INDIAN VCP,.......... Voluntary Cleanup Priority Listing
VCP,.............. Voluntary Response Program 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
DEBRIS REGION 8,........ Torres Martinez Reservation Illegal Dump Site Locations
CDL,.................. Open Dump Inventory
INDIAN CDL,......... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites
US CDL,............... Clandestine Drug Labs
CDL,.................. Clandestine Drug Lab Listing
US HIST CDL,........ National Clandestine Laboratory Registrar

Local Land Records
LIENS 2,.............. CERCLA Lien Information

Records of Emergency Release Reports
HMIRS,............... Hazardous Materials Information Reporting System
SPILLS,.............. Release Notifications
SPILLS 90,.......... SPILLS 90 data from FirstSearch

Other Ascertainable Records
RCRA NonGen / N, R,.......... RCRA - Non Generators
DOT OPS,.............. Incident and Accident Data
DOC,................... Department of Defense Sites
FOJ,.................. Formerly Used Defense Sites
CONSENT,.............. Superfund (CERCLA) Consent Decrees
ROD,................... Records Of Decision
UMTRA,................. Uranium Mill Tailings Sites
US MINES,............. Mines Master Index File
TRIS,.................. Toxic Chemical Release Inventory System
TSCA,.................. Toxic Substances Control Act
FTDS,.................. FIFRA TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act/ TSCA (Toxic Substances Control Act)
HIST FTDS,......... FIFRA/TSCA Tracking System Administrative Case Listing
EXECUTIVE SUMMARY

SSTS, Section 7 Tracking Systems
ICIS, Integrated Compliance Information System
PADS, PCB Activity Database System
MLTS, Material Licensing Tracking System
RADINFO, Radiation Information Database
FINDS, Facility Index System/Facility Registry System
RAATS, RCRA Administrative Action Tracking System
RMP, Risk Management Plans
UIC, Underground Injection Wells Listing
DRCLEANERS, Permitted Drycleaner Facility Listing
AIRS, List of Permitted Facilities
INDIAN RESERV, Indian Reservations
SCRD DRYCLEANERS, State Coalition for Remediation of Drycleaners Listing
LEAD SMELTERS, Lead Smelter Sites
2002 COR ACTION, 2002 Corrective Action Program List
EPA WATCH LIST, EPA WATCH LIST
COAL ASH DSO, Steam-Electric Plant Operation Data
PCB TRANSFORMER, PCB Transformer Registration Database
CDAI ASH EPA, Coal Combustion Residues Surface Impoundments List
US FIN ASSUR, Financial Assurance Information
US AIRS, Aromatic Information Retrieval System Facility Subsystem
PRP, Potentially Responsible Parties
Financial Assurance, Financial Assurance Information Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records
EDR MGP, EDR Proprietary Manufactured Gas Plants
EDR US HSI Auto Stat, EDR Exclusive Historic Gas Stations
EDR US HSI Cleaners, EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives
RGA LF, Recovered Government Archive Solid Waste Facilities List
RGA LUST, Recovered Government Archive Leaking Underground Storage Tank
RGA HWS, Recovered Government Archive State Hazardous Waste Facilities List

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 registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle 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 12/04/2013 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equatorial Elevation Address Direction / Distance Map ID Page
LANAI AIRPORT (FMID LNY20123) LANAI AIRPORT 0.000 0.000 0.250 1 7
EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name

CASTLE & COKE - MANELE BAY
MAUI ELECTRIC CO - MIK BASSIN
DOLE PLANTATION
LANAI LANDFILL
DOLE PLANTATION (PALAWAI & 5319 BA)
LANAI LDF, LANAI DUMP SITE PALAWAI BASIN
LANAI DRUM SITE NO. 3
LANAI DRUM SITE NO. 2
LANAI DUMP SITE
LANAI DRUM SITE NO. 1
TRANSPORTATION SECURITY ADMINISTRATION
KAUAIAPAU PETROLEUM TERMINAL
MIK BASSIN GENERATING STATION
FAA - LANAI
CASTLE & COKE - MANELE BAY
MIK BASSIN PAVING & FENCING
MORRIS, CHARLES AND ROSS, NORMAN -
MIK BASSIN GENERATING STATION
MAUI ELECTRIC CO LTD MIK BASIN PO

Datasets

US AIRS
FINNO, US AIRS
RCRA-TESS, CERC-NIFRAP, RCRA
NHDON, NLNR, FINDS
SHMI, RQA WRS
SHMI, RQA HWS
CERC-NIFRAP
CERC-NIFRAP
CERC-NIFRAP
CERC-NIFRAP
CERC-NIFRAP
CERC-NIFRAP
RCRA-CESQG
RCRA-CESQG, FINDS
RCRA-CESQG, PCDS
FINDS
FINDS
FINDS
FINDS
SPILLS, AIRS
HAZNET
### MAP FINDINGS SUMMARY

<table>
<thead>
<tr>
<th>Database</th>
<th>Search Distance (Miles)</th>
<th>Target Property</th>
<th>&lt; 1/8</th>
<th>1/8 - 1/4</th>
<th>1/4 - 1/2</th>
<th>1/2 - 1</th>
<th>&gt; 1</th>
<th>Total Plotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDIAN UST</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>FEMA UST</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>State and tribal institutional</td>
<td>control / engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>control registries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG CONTROLS</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>INST CONTROL</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>State and tribal voluntary</td>
<td>cleanup sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDIAN VCP</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>VCP</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>State and tribal Brownfields</td>
<td>sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BROWNFIELDS</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>ADDITIONAL ENVIRONMENTAL</td>
<td>RECORDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Brownfield lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US BROWNFIELDS</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Local Lists of Landfill/ Solid</td>
<td>Waste Disposal Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBRIS REGION 9</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>ODI</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>INDIAN ODI</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Local Lists of Hazardous waste</td>
<td>/ Contaminated Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US CDL</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>CDL</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>US HST CDL</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Local Land Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LUENS 2</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Records of Emergency Release</td>
<td>Reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HMIRS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>SPILLS 10</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Other Ascertifiable Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCRA NonGen / NLR</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>DOT OMEP</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>OMEP</td>
<td>1.000</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>FUDS</td>
<td>1.000</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>CONSENT</td>
<td>1.000</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>ROD</td>
<td>1.000</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>UMTRA</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>US MINES</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>TRIS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
</tbody>
</table>

---

### MAP FINDINGS SUMMARY

<table>
<thead>
<tr>
<th>Database</th>
<th>Search Distance (Miles)</th>
<th>Target Property</th>
<th>&lt; 1/8</th>
<th>1/8 - 1/4</th>
<th>1/4 - 1/2</th>
<th>1/2 - 1</th>
<th>&gt; 1</th>
<th>Total Plotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>FTTS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>HIST FTTS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>SSTS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>ICIS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>PACIS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>MLTS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>RADINFO</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>FINDS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>RRAATS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>RMP</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>U.S.</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>DRYCLEANERS</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>AIRS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>INDIAN RESERVE</td>
<td>1.000</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SCRIP DRYCLEANERS</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LEAD SMELTERS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>2020 COR ACT/ON</td>
<td>0.250</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>EPA WATCH LIST</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>COAL ASH DOE</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>PCB TRANSFORMER</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>COAL ASH EPA</td>
<td>0.500</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>US FIN ASSUR</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>U.S. AIRS</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>PEP</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>Financial Assurance</td>
<td>TP</td>
<td></td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>0</td>
</tr>
</tbody>
</table>

### EDR HIGH RISK HISTORICAL RECORDS

| EDR Exclusive Records           |                          |                 |       |           |           |         |     |               |
| EDR MGP                         | 1.000                   |                 | 0     | 0         | 0         | 0         | 0   | 0             |
| EDR US Hist Auto Stat           | 0.250                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| EDR US Hist Cleaners            | 0.250                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |

### EDR RECOVERED GOVERNMENT ARCHIVES

| Exclusive Recovered Govt. Archives |                          |                 |       |           |           |         |     |               |
| RQA LF                           | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| RQA LUST                         | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |
| RQA HWS                          | TP                      |                 | NR    | NR        | NR        | NR      | NR  | 0             |

**NOTES:**
- TP = Target Property
- NR = Not Requested at this Search Distance
- Sites may be listed in more than one database
<table>
<thead>
<tr>
<th>UST</th>
<th>EDR ID Number</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>Elevation (ft)</th>
<th>Longitude</th>
<th>Latitude</th>
<th>Date Installed</th>
<th>Tank Status</th>
<th>Tank Capacity</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>U00222164</td>
<td>9-402365</td>
<td>LANAI AIRPORT (PMD LNY620123)</td>
<td>HH</td>
<td>96763</td>
<td>0.001</td>
<td>-175.71</td>
<td>20.71</td>
<td>09/23/1994</td>
<td>Permanently Out of Use</td>
<td>350</td>
<td>Diesel</td>
</tr>
</tbody>
</table>
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 for 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. The NPL includes sites where immediate remedial actions are necessary to protect human health and the environment. As such, EDR provides current 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: 10/25/2013
> Data Date Arrived at EDR: 11/11/2013
> Date Made Active in Reports: 01/09/2014
> Number of Days to Update: 78

Sources:

- EPA's Environmental Photographic Interpretation Center (EPIC)
  - Telephone: 202-594-7333
  - EPA Region 1
    - Telephone: 617-918-1143
    - Telephone: 214-655-9659
  - EPA Region 2
    - Telephone: 215-814-5418
    - Telephone: 913-551-7247
  - EPA Region 4
    - Telephone: 404-562-8033
    - Telephone: 303-312-6774
  - EPA Region 5
    - Telephone: 312-886-6886
    - Telephone: 415-347-4243
  - EPA Region 10
    - Telephone: 206-553-9855

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: 10/25/2013
Date Made Active in Reports: 02/28/2014
Number of Days to Update: 78

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
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Federal Deleted NPL site list

DELETED NPL: National Priority List Deletions

The National OFR 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 303.425 (e), sites may be deleted from the NPL, where our further response is appropriate.

Date of Government Version: 10/25/2013
Date Made Active in Reports: 02/28/2014
Number of Days to Update: 78

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Made Active in Reports: 02/28/2014
Number of Days to Update: 94

Federal CERCLISINFRAFAP site list

CERCLIS-INFRAFAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this site on the National Priorities List (NPL), unless information indicates the decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the decision is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Made Active in Reports: 02/28/2014
Number of Days to Update: 94

Federal RCRA CONRACTS facilities list

CONRACTS: Corrective Action Report

CONRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 10/25/2013
Date Made Active in Reports: 02/28/2014
Number of Days to Update: 94

Data Release Frequency: Quarterly
GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 02/09/2013
Date Data Available at EDR: 02/09/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65
Source: EPA Region 10
Telephone: 206-953-2872
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/13/2014
Data Release Frequency: Quarterly

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: 07/29/2013
Date Data Available at EDR: 07/29/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129
Source: EPA Region 9
Telephone: 415-972-3308
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/13/2014
Data Release Frequency: Quarterly

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 17 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Available at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 62
Source: EPA Region 8
Telephone: 303-312-8137
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/13/2014
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: 12/31/2012
Date Data Available at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

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: 05/13/2011
Date Data Available at EDR: 05/11/2011
Date Made Active in Reports: 09/14/2011
Number of Days to Update: 34
Source: EPA Region 6
Telephone: 214-685-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 02/13/2014
Date Data Available at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10
Source: EPA Region 5
Telephone: 312-885-6138
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 05/13/2014
Data Release Frequency: Varies

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: 11/21/2013
Date Data Available at EDR: 11/28/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-550-3420
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/03/2010
Date Data Available at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 93
Source: FEMA
Telephone: 202-646-3767
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

State and tribal institutional controls / engineering control registries
END CONTROLS: Engineering Control Sites.
A listing of sites with engineering controls in place.

Date of Government Version: 01/04/2014
Date Data Available at EDR: 02/09/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 0
Source: Department of Health
Telephone: 404-586-4249
Last EDR Contact: 02/09/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

INST CONTROLS: Sites with Institutional Controls.
Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 01/04/2014
Date Data Available at EDR: 03/06/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 0
Source: Department of Health
Telephone: 804-586-4249
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/12/2008
Date Data Available at EDR: 04/22/2008
Date Made Active in Reports: 04/22/2008
Number of Days to Update: 27
Source: EPA Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/29/2008
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R5: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 5.

Date of Government Version: 09/17/2013
Date Data Available at EDR: 10/01/2013
Date Made Active in Reports: 12/05/2013
Number of Days to Update: 0
Source: EPA, Region 1
Telephone: 671-918-1102
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies
GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 clean up properties.

Date of Government Version: 01/04/2014
Date Data Added at EDR: 02/05/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 9
Source: Department of Health
Telephone: 808-586-4246
Next Scheduled EDR Contact: 05/09/2014
Data Release Frequency: Varies

INDIAN COUNTRY: Report on the Status of Open Dumps on Indian Land
Location of open dumps on Indian land.

Date of Government Version: 12/21/1988
Date Data Added at EDR: 11/04/2013
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-4245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 09/17/2014
Data Release Frequency: Varies

Annual environmental tracks.

Local 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: 01/04/2014
Date Data Added at EDR: 02/05/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 9
Source: Department of Health
Telephone: 808-586-4246
Next Scheduled EDR Contact: 05/09/2014
Data Release Frequency: Varies

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites located 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 Added at EDR: 09/07/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-347-4219
Next Scheduled EDR Contact: 09/12/2014
Data Release Frequency: No Update Planned

CERCLA: Superfund 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 addresses releases and threatened releases of contamination.

Date of Government Version: 02/04/2013
Date Data Added at EDR: 04/05/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-584-0132
Next Scheduled EDR Contact: 09/17/2014
Data Release Frequency: Varies

US CERCLA: National CERCLA Data Warehouse
US CERCLA: National CERCLA Data Warehouse

Date of Government Version: 01/04/2014
Date Data Added at EDR: 02/05/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 9
Source: Department of Health
Telephone: 808-586-4246
Next Scheduled EDR Contact: 05/09/2014
Data Release Frequency: Varies

Local Lists of Hazardous Waste / Contaminated Sites

US CERCLA: CERCLA Data Lab Listing
A listing of CERCLA data lab sites locations. The U.S. Department of Justice 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 CERCLA data lab sites or other contamination.

Date of Government Version: 12/04/2013
Date Data Added at EDR: 10/02/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 56
Source: Drug Enforcement Administration
Telephone: 202-584-3409
Next Scheduled EDR Contact: 09/18/2013
Data Release Frequency: Quarterly

Local Land Records

LENS 2: CERCLA: Land 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.

Date of Government Version: 02/04/2013
Date Data Added at EDR: 04/05/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-584-0132
Next Scheduled EDR Contact: 09/17/2014
Data Release Frequency: Varies

TEC3875991.2s Page GR-10

FEA REF-448