THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File: 1525.38.049

December 4, 2017

Sent via electronic mail only
Patricia R. Bickar c/o Sarah Bosma, Public guardian
PO Box 110225
Juneau, AK 99811-0225

Re: Decision Document: Commercial Property - 102 & 104 Burkhart Street
Cleanup Complete Determination

Dear Ms. Bosma:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Commercial Property - 102 & 104 Burkhart Street Site located at 102 and 104 Burkhart Drive in Sitka. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Commercial Property - 102 & 104 Burkhart Street, which is located in the ADEC office in Juneau, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:
Commercial Property - 102 & 104 Burkhart Street
102 & 104 Burkhart Drive
Sitka, AK 99835-9753

Name and Mailing Address of Contact Party:
Patricia R. Bickar c/o Sarah Bosma
PO Box 110225
Juneau, AK 99811-0225

DEC Site Identifiers:
File No.: 1525.38.049
Hazard ID.: 26263

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background
The site consists of lots 3 (104 Burkhart Street) and 4 (102 Burkhart Street) of block 1 of the Turney-Burkhart Subdivision in Sitka. The property was historically used for light to heavy commercial and construction, equipment maintenance, and storage activities. A Phase I Environmental Assessment dated July 28, 2014 and prepared by R&M engineering Ketchikan Inc. was received by the ADEC in August of 2014. The site was added to the ADEC Contaminated Sites Database on August 4, 2014 following receipt of the assessment due to the presence of hazardous substances on the property.

Contaminants of Concern
During the site characterization and cleanup activities at the site, samples were collected from soil and analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). The groundwater on site was also sampled and was found to be free of contamination. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- DRO
- RRO

Cleanup Levels
The cleanup levels that apply to the site are the most stringent of 18 AAC 75.340 Table B2 for the migration to groundwater and ingestion pathways for the over-40 inch precipitation zone. DRO and RRO were detected in soil above these cleanup levels.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Pathway
DRO	230	Migration to Groundwater
RRO	8,300	Ingestion

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities
The site was added to the ADEC Contaminated Sites database in August 2014 following R&M Engineering's (R&M) report (Field Reconnaissance Report, dated August 4, 2014) of contaminated soils with petroleum concentrations greater than 18 AAC 75 cleanup levels. During the inspection on August 4, 2014, eight test pits (TP1 through TP8) were excavated from areas with visibly stained soil. TP1 through TP5 and TP7 were located on 104 Burkhart Street and TP6 and TP8 were dug on 102 Burkhart Street. Two soil samples were collected from the bottom of each pit and analyzed for GRO, DRO, and RRO. The GRO and RRO results were below the most stringent of 18 AAC 75 Table B2 cleanup levels. The DRO results for test pits 1, 3, and 6 were above the cleanup levels with the highest concentration (13,000 mg/kg DRO) in TP6 north of the building at 102 Burkhart Street.

In December of 2014, Coastal Excavation Inc. was contracted to remove all of the construction debris, boats, old vehicles, and other debris off site to facilitate site characterization. The debris was taken to the

local waste transfer facility for disposal. All of the old heating oil tanks and fuel drums were inspected and emptied when needed and loaded on scrap metal containers for out of state shipping and disposal. Any fuel drums, chemical containers, or any other containers that were full were moved inside the existing building so that the contents could be analyzed and a disposal method could be determined. Old batteries were collected and taken to the local NAPA store for recycling.

On February 4, 2015, R&M returned to the site to perform additional investigation after the solid waste was removed. Areas that were targeted for investigation were those that had visible surface staining and areas identified by tenants of the building. At this time, an additional 15 test pits were dug, TP13 through TP27, on both sides of the property. Analytical soil samples were collected from each pit and analyzed for GRO, DRO, RRO, BTEX, PAHs, VOCs, SVOCs, and PCBs. Soil samples were also collected from the original test pits 1 through 4 and analyzed for BTEX, PAHs, VOCs, SVOCs, and PCBs. All of the results were below the cleanup levels, but since there was some soil staining noted in some pits, further investigation was warranted. Prior to moving forward with excavations, a temporary containment area was built on the 104 side of the property to hold contaminated soils until they could be transported off-site to an approved facility. This containment was lined and bermed and covered each night to protect it from the weather.

After the initial site characterization, the cleanup of the site was completed in 2 parts; 102 Burkhart Street was cleaned up prior to 104 Burkhart Street. The site investigation identified 6 areas of the site that had contamination exceeding ADEC cleanup levels. Of these areas, 2 were on the 102 Burkhart side (cleanup areas 5 & 6). Cleanup area 5 was located northeast of the shop building centered on TP5 and cleanup area 6 was located adjacent to the north side of the shop centered on TP6.

Excavation on 102 Burkhart in cleanup areas 5 and 6 occurred on April 30th through May 1st 2015 and began with the removal of the top 4-6 inches of surface soil. A photoionization detector (PID) was used to field screen soils for petroleum contamination. Soils having PID results that indicated contamination greater than ADEC cleanup levels were excavated. These excavated soils were submitted to SGS Laboratory (SGS) and analyzed for DRO and RRO using Alaska Methods. The results of the analyses indicated that DRO concentrations in the range of 100 to 3700 mg/kg and RRO concentrations of 200 to 13,000 were present. The PID-guided excavation continued until PID results were either non-detect or below ADEC cleanup levels. Analytical samples were collected from the completed excavation and submitted to SGS for analysis of DRO and RRO. The excavated areas were lined with an impermeable liner and backfilled with clean gravel until the confirmation laboratory results were received. The SGS laboratory results for the samples, dated May 26th 2015, indicated that the excavation was complete and free from petroleum contamination exceeding ADEC cleanup levels except for samples 5-2, 6-3, and 6-9 which had DRO concentrations greater than the 230 mg/kg cleanup level. These samples had DRO concentration ranging from 300-400 mg/kg.

After receipt of these data, R&M conducted additional excavations on July 2nd 2015 in the pockets of contamination exceeding ADEC cleanup levels. After the additional excavation was complete, soil samples were submitted to SGS for the analysis of DRO, RRO, SVOCs, VOCs, and PCBs. The results were documented in the SGS report dated July 14th 2015. The results for all of the samples were non-detect indicating that the excavation was complete and that the 102 Burkhart portion of the property was free from contamination exceeding ADEC cleanup levels. R&M estimated that the amount of contaminated soil excavated from 102 Burkhart was 45 cubic yards (yd^3). Of the 45 yd^3, 40 was sent to Republic Services in Washington for disposal and documentation of that transfer was provided in the Report. The remaining 5 yd^3 was stored on site. A letter from the ADEC dated September 2, 2015 was sent approving the report and

documenting that the 102 Burkhart Street side of the property was free of environmental contamination exceeding ADEC cleanup levels.

Cleanup areas 1 through 4 were on the 104 Burkhart Street side of the site. Cleanup area 1 was in the southeast corner of the site at TP1. Cleanup area 2 was at the southwest corner of 104 Burkhart Street just west of cleanup area 1 at TP 7. Cleanup area 3 was located in the center of the 104 Burkhart side of the property at TP3. Cleanup area 4 was located northwest of cleanup area 3 at TP3.

Cleanup area 1 had DRO just above the cleanup level at 260 mg/kg. The excavation was guided by a PID and although visibly stained soil was observed, the PID readings did not suggest heavy contamination until about 8 feet (ft.) below ground where groundwater was encountered. Extensive buried debris was encountered on the northern sidewall and was excavated. Approximately 360-400 yd^3 of soil was excavated from cleanup area 1 and 15 confirmation soil samples and 2 duplicates were collected from the base and sidewalls of the excavation a few days later when the groundwater and surface water runoff had subsided. The confirmation soil samples were analyzed for DRO and RRO. Two of these samples were also analyzed for SVOCs. The results with the exception of sample A-1-14C collected from the northeastern sidewall were all below the cleanup levels. Additional excavation was completed at sample A-1-14C which had a DRO value of 560 mg/kg was completed on May 13, 2016. Field screening samples were collected using a PID and another confirmation sample was collected from the sidewall. It was analyzed for GRO, DRO, RRO, VOCs, and SVOCs. The results were all below applicable cleanup levels. The final excavation was about 45 by 50 ft. and about 8 ft. deep.

Cleanup area 2 began at TP7 where initial laboratory data indicated that contamination was below cleanup levels but visibly stained pockets of contamination were observed in a band in the sidewall of the test pit at 3 to 6 ft. below ground surface. These were excavated along with an additional foot of material below the pockets of stained soils. The excavation was guided by a PID and 2 confirmation samples and a duplicate were collected from the base and sidewalls. The final volume of excavated material was 25-30 yd^3. These were analyzed for GRO, DRO, RRO, VOCs, and SVOCs. The results were non-detect for all constituents. The sample collected from the base of the excavation was also analyzed for PCBs and none were detected.

The excavation of cleanup area 3 began at TP3 where DRO was present at 340 mg/kg. Visibly stained soil was excavated until PID readings indicated that all of the contaminated material had been excavated. Confirmation samples were collected from the base and sidewalls of the excavation and were field screened using a PID. A sample from the base of the excavation was collected and analyzed for GRO, DRO, RRO, VOCs, and SVOCs. The resulting data were non-detect for all analytes. The excavation was approximately 7 by 6 ft. wide and 5 ft. deep. The excavation was briefly re-opened to collect a PCB sample; the result was non-detect. The 7-8 yd^3 of contaminated soil was transferred to the stockpile for disposal.

Cleanup area 4 began at TP21 where trace levels (0.009 mg/kg) of PCBs were identified in addition to stained soil. There was a layer of stained soil at approximately 3 ft. below ground that was 1-3 ft. thick. A total of 60 yd^3 was excavated from this location and the excavation was about 15 by 20 ft wide and 5 ft. deep. Four conformation PID samples were collected from the base and sidewalls and 2 of these were submitted to a laboratory and analyzed for GRO, DRO, RRO, VOCs, and SVOCs. The results were non-detect for all analytes. This excavation was also re-excavated, and a PCB sample collected, which was non-detect.

Cleanup area 5 originated at TP6 where DRO was present at 3,700 mg/kg and RRO was present at 13,000 mg/kg. The area was first stripped of the top layer of soil and a PID was used to screen soils to about 3 ft.

below the surface. Approximately 15 yd^3 of contaminated soil was excavated and 5 analytical confirmation samples were collected from the base and sidewalls of the excavation and analyzed for DRO and RRO. A geotextile fabric was placed in the excavation and it was backfilled with clean shot rock because the excavation could not be left open due to its position just north of the front of the building where people needed access. The results were below the cleanup levels with the exception of 1 sample collected from the bottom of the excavation which had a DRO value of 340 mg/kg. R&M returned to the site and excavated additional material (approximately 2-3 yd^3). Two confirmation soil samples were collected from the base and sidewall and analyzed for GRO, DRO, RRO, VOCs, SVOCs, and PCBs. The results were non-detect for all analytes.

Cleanup area 6 centered on TP13 through TP15 in front of the entrance to the building where initial field screening and analytical results did not indicate contamination, but surface staining was present. The top 4 to 6 inches of visibly stained soil was stripped off and placed in the contaminated soil stockpile. Field screening with a PID guided the excavation. Three pockets in area 6 had elevated PID readings and were excavated an additional 2 to 3 ft. An estimated 20 yd^3 of soil was excavated. Confirmation samples (14 and a duplicate) were collected and analyzed for DRO and RRO. The results were below ADEC cleanup levels with the exception of the base of the excavation and a sidewall which had DRO values of 304 and 400 mg/kg respectively. An additional 1 to 2 yd^3 of soil was excavated making the excavation dimensions about 90 by 20 ft. and placed in the stockpile. A confirmation sample was collected from the base and sidewall in addition to a duplicate and these were analyzed for GRO, DRO, RRO, VOCs, SVOCs, and PCBs. The results were all non-detect.

The volume of contaminated soil from areas 5 and 6 was approximately 45 yd^3 and was sent to Republic Services in Washington for disposal (40 yd^3) and Bicknell Inc. in Juneau for treatment (5 yd^3). The 520 yd^3 of contaminated soil generated from areas 1 through 4 were also shipped to Bicknell Inc. for treatment. Nine drums of suspected diesel fuel was tested for DRO and VOCs and after confirmation that the contents were diesel, it was given to the City of Sitka Ports and Harbors Department and shipped to Emerald Services in Seattle for processing. For the other potentially hazardous waste such as paint and solvents, Pegex was contracted to inventory the materials and sent them to Burlington Environmental LLC.

A groundwater monitoring well was installed on November 14, 2017 in cleanup area 1 using an excavator due to the presence of 12 inch minus shot rock. The pit for the well was dug 14 ft. deep. There was no sheen on the groundwater. A 12 ft. dual walled corrugated HPDE slotted drain casing was placed in the excavation followed by a pre-fabricated 2.5 ft. monitoring well screen encased in a filter sock. The area around the slotted drain and the monitoring well were backfilled with 1.5 inch drain rock. Once installed the well was purged until the turbidity dropped. The well was sampled on November 16, 2017 using a bottom fill bailer once the well was adequately purged. A groundwater sample, duplicate, and a trip blank were collected and analyzed for DRO, RRO, PAHs, BTEX, and VOCs. All of the results were below the laboratory's detection limits and indicated that the groundwater on site is not contaminated.

Cumulative Risk Evaluation

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination

may reach human or ecological receptors. ETM results show all pathways to be one of the following: De-Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Contamination is below the most stringent of 18 AAC 75 cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination is below the most stringent of 18 AAC 75 cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination is below the most stringent of 18 AAC 75 cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contamination is below the most stringent of 18 AAC 75 cleanup levels.
Groundwater Ingestion	Pathway Incomplete	The groundwater meets the most stringent of 18 AAC 75 cleanup levels.
Surface Water Ingestion	Pathway Incomplete	Surface water was not impacted by contamination.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Contamination did not affect ecological receptors.

Notes to Table 2: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination. "Pathway Incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure Controlled" means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

ADEC Decision

Soil contamination at the site has been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325(i). A "site" as defined by 18 AAC 75.990 (115) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

3. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being

considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 555 Cordova Street, Anchorage, Alaska 99501-2617, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, P.O. Box 111800, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please feel free to contact me at (907) 465-5207, or email at Danielle.Duncan@alaska.gov.

Sincerely,

Danielle Duncan
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit