

## Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

610 University Ave. Fairbanks, Alaska 99709-3643 Main: 907.451.2166 Fax: 907.451.2155

File No: 2260.57.001

February 4, 2015

Reverend Steven C. Moore Corporation of the Catholic Archbishop of Anchorage 225 Cordova Street, Anchorage, AK 99501

Re: Decision Documents - Cleanup Complete for *Tazlina Copper Valley School Site*, Hazard ID 25429; and Cleanup Complete with Institutional Controls for *Tazlina River Dumpsite*, Hazard ID 26337.

#### Dear Father Moore:

The Alaska Department of Environmental Conservation (DEC) has reviewed the environmental records for the referenced site. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

#### Site Names and Reference Info:

(Former) Tazlina Copper Valley School, File No. 2260.57.001, Hazard ID: 25429 Tazlina River Dumpsite, File No. 2260.38.001, Hazard ID: 26337

## Name and Mailing Address of Contact Party:

Reverend Steven C. Moore Corporation of the Catholic Archbishop of Anchorage 225 Cordova Street, Anchorage, AK 99501

## **Regulatory Authority for Determination:**

18 AAC 75

#### Site Description and Background

The community of Tazlina developed around the old Copper Valley School, built by the Catholic Church in 1954 to board students from all over the state. The school closed in 1971 when local high schools were constructed in the remote areas of the state and boarding schools were discontinued. A fire in 1976 burned the main school buildings, and several other structures on the property have since fallen into disrepair. It is believed that a significant portion of the salvageable materials and equipment had been removed for future use. Site access was uncontrolled and the practice of vandalism existed.

#### **Contaminants of Concern**

Based on the historical site use, it was presumed that petroleum hydrocarbon contaminants would be present on the site. However, investigation and sampling did not confirm the presence of significant petroleum contaminants above cleanup levels beyond incidental surface spills considered di minimis and removed. No contaminants of concern exist on the Tazlina Copper Valley School site with the exception of the Tazlina River Dumpsite, addressed separately. The Tazlina Copper Valley School site will be issued a Cleanup Complete determination.

Upon completion of demolition and cleanup activities, lead was the only contaminant of concern identified in one sample associated with a former dumpsite (Tazlina River Dumpsite) that remained above cleanup levels and was not attributed to background concentrations. This dumpsite will be identified in the Contaminated Sites Database as Site Name: Tazlina River Dumpsite, under Hazard ID 26337, with an institutional control that identifies the potential for contaminants to exist in the subsurface at this location. This site will be closed with a Notice of Environmental Contamination (NEC) placed as a deed notice identifying the location.

The cleanup level for lead is 400 mg/kg.

## **Characterization and Cleanup Activities**

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 2009 with a Reuse & Redevelopment (Brownfield) Program Property Assessment and Cleanup Plan (PACP). DEC contractors completed a PACP at the Copper Valley School site in Tazlina, Alaska in September 2009. The overall project objective was to complete a limited environmental assessment to provide a basis for further assessment, and help both the community and landowner develop definitive plans for site management and reuse. The property assessment included a records review of available information sources, reviewed historical aerial photographs, and conducted a site visit and interviews with knowledgeable personnel. Although no sampling was completed, the conclusions indicated a high potential for contamination and recommended additional characterization to more completely understand the potential environmental impacts at this site. DEC brownfield staff then assisted the community in obtaining an Environmental Protection Agency (EPA) Targeted Brownfield Assessment (TBA).

The EPA completed a site reconnaissance and asbestos survey as part of their TBA in 2011 with the primary objective to identify the nature and extent of perceived environmental concerns previously identified in the PACP. Prioritized areas of concern included uncontrolled site-wide asbestos containing material (ACM), multiple fuel storage tanks (both buried and aboveground), the former shop building area, crates of unknown powder, and an open artesian well on the property. Various other ancillary locations were also addressed associated with refuse, vehicles, leaking containers, and dumpsites.

The following summarizes the findings of EPA's evaluation as they relate to specific elements of interest in the investigation:

- 1. ACM friable and non-friable asbestos was identified onsite. The results of the uncontrolled ACM were forwarded to EPA Emergency Preparedness and Prevention Unit for intervention if the responsible party was unable to address remedial actions.
- 2. ASTs no environmental concerns were identified at any of the five tank locations, and recommendations for removal were provided.
- 3. Artesian Well/Cistern the well was recommended for proper closure as was the cistern, since it represented a direct conduit for groundwater contamination.
- 4. USTs no significant impacts were detected and the tank was recommended for closure.
- 5. Maintenance Shop all identified petroleum impacts were reported below the DEC cleanup levels. Metals results were inconclusive, but believed to be consistent with background concentrations for the area. Majority of concern was solid waste.
- 6. Paint pallets shallow soil sampling indicated that concerns over leaking leaded paint did not lead to releases of lead into the soil. Chromium and arsenic were present at concentrations believed to be naturally occurring background, other analytes were not detected at concentrations to support the paint as the source of metals contamination.
- 7. Dumpsites lead contamination from battery cores was the primary driver for cleanup of abandoned dumps on the property, and were recommended for removal.
- 8. White powder crates of white powder were presumed to consist of a homogenous mixture of non-ACM gypsum powder, but uncertainties about the contents of all the crates led to the recommendation to treat all crates as potentially ACM containing at disposal.
- 9. Unused paints lead was present in all samples collected and recommendations for proper disposal were provided.
- 10. Painted debris results were insufficient to provide details on disposal requirements, and a recommendation for further testing prior to disposal was made.
- 11. School debris it was determined unlikely that either polychlorinated biphenyls or lead were chemicals of concern amongst the debris, although lead in soil was a concern. A toxicity characteristic leaching procedure (TCLP) testing program was recommended.
- 12. Groundwater no groundwater impacts were detected.

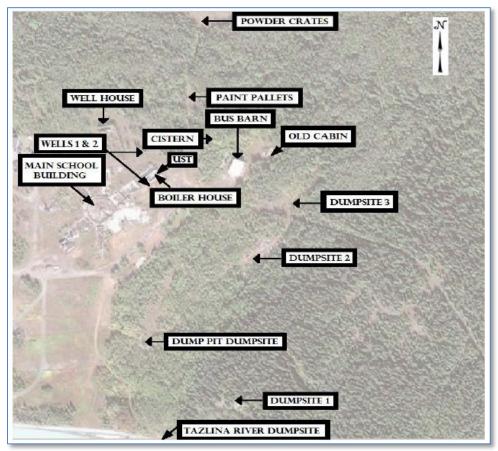
In 2013, the EPA Emergency Preparedness and Prevention Unit determined that the friable ACM identified in the TBA warranted immediate action due to the risk posed by the uncontrolled nature of the ACM, the proximity of residential property to the site, and the long history of public access on and across the property. This requirement by EPA for action led to the cleanup of the site by the Corporation of the Catholic Archbishop of Anchorage, rather than having EPA take lead.

In 2013, the Corporation of the Catholic Archbishop of Anchorage contracted the services of White Environmental Consulting (WEC) to complete a site-wide remediation plan to address all outstanding environmental concerns. The intent of the project was to remove all structures, debris, tanks, and dumpsites, and all associated and potential environmental contaminants. WEC coordinated all workplans and field activities through the EPA On-Scene Coordinator and the DEC as appropriate. The workplan was implemented properly and all friable ACM was removed and transported to Anchorage Regional Landfill for disposal. Non-friable ACM, along with building debris, tanks and waste materials were removed from the site and disposed at the Palmer Reclamation Facility.

Primary elements of the 2013 cleanup operations included:

- 1. Main School building demolition and removal approximately 100,000 square feet (sf) of burned rubble, metal and debris were removed from the site.
- 2. Kitchen building contained general debris and ACM in wallboard which were removed from site.
- 3. Boiler House a 5,000 sf building with friable asbestos insulation that required abatement. Underground storage tanks were also buried under an in vicinity of building. All were removed from site.
- 4. Bus Barn (Maintenance) facility about 4,500 sf structure that was vandalized, and a 55 gallon aboveground tank were removed.
- 5. Dumpsites 1 through 3 and dump pit four locations used for debris, appliances and refuse were excavated and removed.
- 6. Miscellaneous structures an old cabin, well house, and cistern were demolished and removed. The cistern was filled in to mitigate connectivity with the groundwater table.
- 7. Artesian wells two wells were decommissioned properly.
- 8. Abandoned storage areas several hundred crates of white powder (gypsum) and an area of unused leaded paints were removed. Other debris located across the property (trash, vehicles, old furniture) were removed.
- 9. Identified environmental items that required segregation and off-site disposal, but no sampling, were removed and disposed of properly through a waste management company.

## Detailed figure of building locations and hazard locations on former school property.



Through coordination with EPA and DEC, the Tazlina River Dumpsite was sampled and low level metals contaminants were detected. Lead was the primary concern with one sample of seven collected from test pits having detectable lead concentrations exceeding the direct contact cleanup levels at a depth of 6 feet below ground surface in the face of the riverbank. EPA conferred with DEC and recommended that the soil in this area from this abandoned dumpsite not be excavated due to the potential for the excavation to lead to increased erosion of the riverbank. Further, the single sample and relatively low level of lead, and the remote nature of the dumpsite, did not warrant further action. Because of these site characteristics, the risk to human health and the environment was determined to be minimal. It is expected that future material that is uncovered through natural erosional processes will be removed when exposed.

5

Other metal contaminants were suspected of being naturally occurring (arsenic, chromium and copper) or were not detected at significant concentrations (antimony). Soil sampling for antimony in 2011 identified only two samples that slightly exceeded migration to groundwater, and no samples that exceeded direct contact. Sampling in 2013 yielded no antimony samples above migration to groundwater. Although no background concentrations exist for antimony, similar concentrations were detected in background sampling and there was no further consideration of antimony as a chemical of concern.

The highest concentration of lead was 563 mg/kg, and is based on direct contact.

#### **Cumulative Risk Evaluation**

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Lead contamination in soil is not included in cumulative risk calculations in that EPA found it inappropriate to apply a reference dose or cancer slope factor to lead. Other metal concentrations of interest remaining at the site were determined to be reflective of background concentrations and are not included in cumulative risk calculations.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

#### **Exposure Pathway Evaluation**

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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, Exposure Controlled, 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 found in former dumpsite location only and is not continuous.	
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is limited in extent and not readily accessible by the public.	
Inhalation – Outdoor Air	Pathway Incomplete	Contamination remains in the sub-surface, but is below inhalation cleanup levels.	
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	No volatile chemicals of concern remain on the property.	
Groundwater Ingestion	Pathway Incomplete	Groundwater contamination is not present.	
Surface Water Ingestion	Pathway Incomplete	Surface water impacts are not present nor presumed to be present in the future.	
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern are at background concentrations.	
Exposure to Ecological Receptors	Pathway Incomplete	Quantity and concentration considered insignificant and any exposure to ecological receptors is unlikely. Although the Copper River is in close proximity, it is not believed that any contamination would migrate and affect the river.	

Notes to Table 2: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be 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 administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

#### **ADEC Decision**

The Tazlina Copper Valley School site (Hazard ID 25429) was cleaned up and will be identified as having Cleanup Complete in the Contaminated Sites Database.

To track on the elevated lead identified in the former dumpsite, a new Contaminated Sites Database record will be established as *Tazlina River Dumpsite* (Hazard ID 26337), and will be identified as having Cleanup Complete with Institutional Controls. Lead contamination was identified in soil at concentrations above cleanup levels in select location within the confines of the former dumpsite; however, the contamination was determined to be minimal in extent and not continuous across the site. DEC has determined that there is no unacceptable risk to human health or the environment.

A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder's Office as an institutional control that identifies the known nature and extent of the dumpsite property, and the measured lead contaminant levels, and defines the conditions that the owners and operators are subject to in accordance with this decision document. A copy of the deed notice that will be recorded is enclosed for your information and signature.

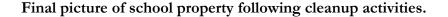
#### **Standard Conditions:**

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. 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. (See attached site figure.)

7

- 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. Landowner shall report to DEC every five years on the land use of the property, or report as soon as the land use or land ownership changes, if sooner.
- 4. Landowner must notify the DEC if significant changes in erosion along the Tazlina River occur.

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 this site may pose an unacceptable risk to human health or 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, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, 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, 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

If you have questions about this closure decision, please feel free to contact me at (907) 451-2166 or john.carnahan@alaska.gov.

Sincerely,

waived.

John Carnahan Project Manager

Enclosure: Notice of Environmental Contamination w/ Attachment A: Cleanup Complete-ICs

Agreement and Signature Page

Site Figures

cc: File

# **Notice of Environmental Contamination**

**Grantor:** State of Alaska

Department of Environmental Conservation

**Contaminated Sites Program** 

**Grantee:** The Corporation of the Archbishop of Anchorage

Tazlina River Dumpsite (Contaminated Sites Database Hazard ID No. 26337)

**Legal Description:** The location generally described as the north bank of the Tazlina River, approximately 0.2 miles southeast of the former Copper Valley School, with the following specific coordinates: 62.044612 N Latitude and -145.401485 (W) Longitude, consisting of approximately 6,500 square feet (0.15 acres) in the NW 1/4 of Section 15: all being located in Township 3 North, Range 1 West, Copper River Meridian

**Recording District:** Chitina

Return to: John Carnahan, DEC, 610 University Avenue, Fairbanks, AK 99709

**State Business- No Charge** 

## NOTICE OF ENVIRONMENTAL CONTAMINATION

As required by the Alaska Department of Environmental Conservation, Grantor, pursuant to 18 AAC 78.625 the Corporation of the Archbishop of Anchorage, Grantee(s), as the owner [and operator] of the subject property, hereby provides public notice that the property located near the Village of Tazlina, approximately 5 miles south of Glennallen at Mile Post 110.5 of the Richardson Highway, near the confluence of the Tazlina and Copper Rivers, and known as the former Tazlina Copper Valley School site, at -145.403060 longitude and 62.047510 north latitude, and more particularly described as follows:

Sections 10 and 15, Township 3N, Range 1W, Copper River Meridian

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 78, revised as of April 8, 2012. This release, assessment and/or cleanup are documented in the attached Alaska Department of Environmental Conservation (DEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db\_search.htm under Hazard ID No. 25429.

DEC reviewed and approved, subject to this and other institutional controls, the assessment and/or cleanup as evidence that the site is protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to DEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment. DEC determined, in accordance with 18 AAC 78.090 - 276 corrective action rules, that site cleanup has been performed to the maximum extent practicable even though residual metals-contaminated soil are present at the related Tazlina River Dumpsite (Hazard ID No. 26337).

Attached is a decision document for the two sites that includes two figures. In Figure 1, the approximate location of the former Copper Valley School Site is outlined in a dashed line (for reference, the location of the former burned school is identified by a dashed circle), and the Tazlina River Dumpsite location is depicted with a solid circle. The second Figure 2 is an aerial photograph showing the former burned school wreckage that has since been removed, and the approximate outline of the Tazlina River Dumpsite in which elevated lead concentrations were detected.

The following institutional controls apply specifically to the property associated with the Tazlina River Dumpsite (Hazard ID 26337):

- 1. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 18 AAC 75.325. 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. Landowner shall report to DEC every five years on the land use of the property, or report as soon as the land use or land ownership changes, if sooner.
- 4. Landowner must notify the DEC if significant changes in erosion along the Tazlina River occur.

This notice remains in effect until a written determination from DEC is recorded that states that soil at the Tazlina River Dumpsite has been shown to meet the most stringent soil cleanup levels in method two of 18 AAC 75.340 and that off-site transportation of soil and groundwater is not a concern.

For more information on the contaminated site in this Notice of Environmental Contamination, please see DEC Contaminated Sites Program file number 2260.38.001, *Tazlina River Dumpsite*, Hazard ID No. 26337.

	2/4/2015
Signature of Authorized DEC Representative	Date

## Attachment A: Cleanup Complete-ICs Agreement and Signature Page\*

The Corporation of the Catholic Archbishop of Anchorage agrees to the terms and conditions of this Cleanup Complete Determination as stated in DEC decision letter for the Tazlina Copper Valley School Site (Hazard ID 25429) and the Tazlina River Dumpsite (Hazard ID 26337), dated January 30, 2015. Failure to comply with the terms and conditions of the determination may result in DEC reopening this site and requiring further remedial action required in accordance with 18 AAC 75.380.

Signature of Authorized Representative, Title Corporation of the Catholic Archbishop of Anchorage	Date
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Printed Name of Authorized Representative, Title	
Corporation of the Catholic Archbishop of Anchorage	

## **Note to Responsible Person (RP):**

After making a copy for your records, please return a signed copy of this form to the DEC project manager at the address on this correspondence within 30 days of receipt of this letter.

SITE FIGURE 1
Location of *Tazlina Copper Valley School* (Haz ID 25429) site and *Tazlina River Dumpsite* (Haz ID 26337)
Adapted from Alaska Mapper tool, January 27, 2015.

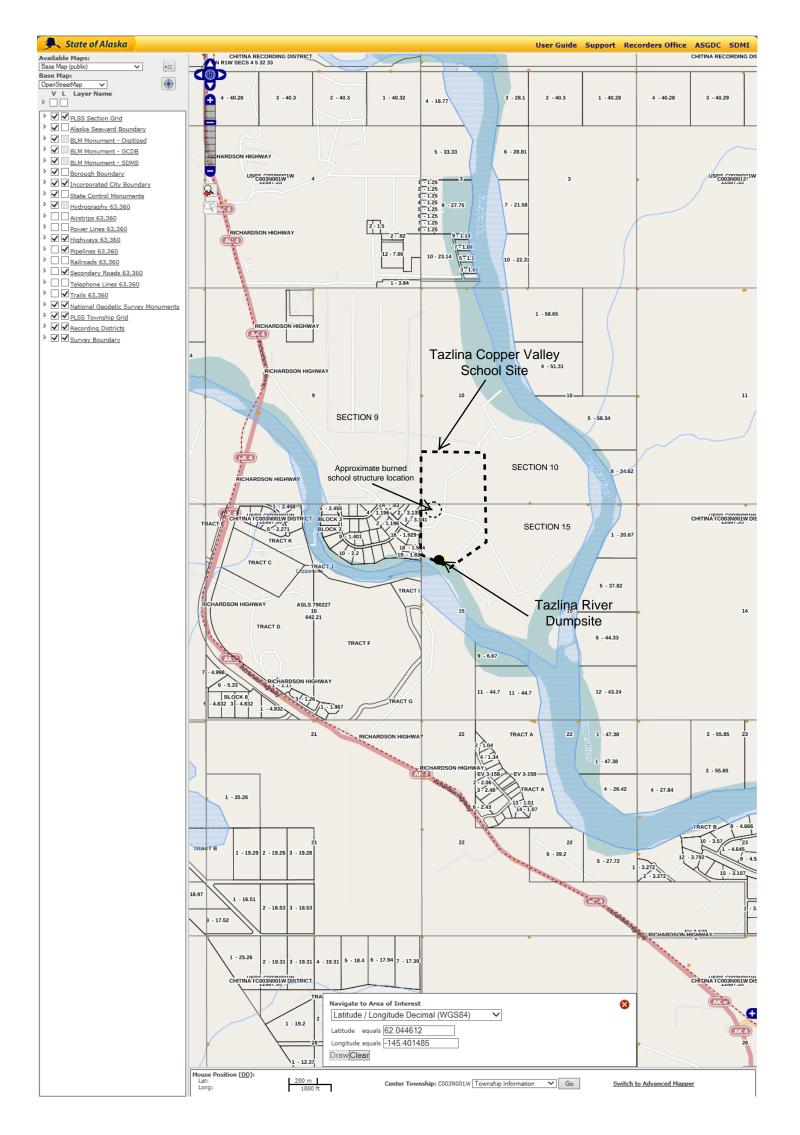


Figure 2

