APPENDIX 4-F

DOT&PF INTERIM GUIDANCE AND STANDARDS FOR NATURALLY OCCURING ASBESTOS MATERIAL USE

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NATURALLY OCCURRING ASBESTOS (NOA) MATERIAL USE
INTERIM GUIDANCE AND STANDARDS

July 17, 2012

This document provides interim guidance to owners and contractors regarding use of Naturally Occurring Asbestos (NOA) material within the State of Alaska. Asbestos fibers are a known health risk. http://www.epa.gov/asbestos/ NOA is not a known risk to human health if asbestos fibers are not disturbed or released into the air. http://www.atsdr.cdc.gov/noa/ Under new state law signed in May 2012, the Alaska Department of Transportation and Public Facilities (ADOT/PF) is charged with reviewing and approving plans using NOA material, if the owner or contractor using the NOA material seeks immunity under state law as provided in House Bill 258 (HB 258). http://www.legis.state.ak.us/PDF/27/Bills/HB0258Z.PDF

During the interim period and under the provisions of HB 258, ADOT/PF will accept proposals from Owner/Contractors seeking to use NOA material on projects. ADOT/PF will review those proposals and in consultation with other departments within the state, approve the proposals for construction. To pursue the immunity granted under HB 258, the Owner/Contractor must follow the goals and interim requirements of the program outlined below. Owners/Contractors are reminded that other federal, state, and local laws and regulations must be followed. While not a comprehensive listing of other requirements, specific attention is directed to worker safety requirements (OSHA & MSHA) and ground stabilization requirements for construction under the Clean Water Act.

Program Goal and Principles

The goal of the ADOT&PF NOA program is to minimize potential dispersion of NOA material into the air. Compliance with ADOT&PF NOA program will follow these principles on using NOA material:

- **Know** – undertake sufficient testing or research to determine if NOA is present, its extents and concentration;
- **Avoid** – do not use NOA material if non-NOA material is reasonably available;
- **Minimize** – if only NOA material is available, take proactive steps to minimize potential for dispersion;
- **Educate** – if NOA material is to be used, notify workers and the public of its use, potential health concerns, and how all can minimize exposure;
- **Contain** – protect constructed NOA material from exposure to the public;
- **Maintain** – ensure operations and maintenance activities are aware of NOA material and take proactive measures to ensure containment of NOA material is perpetuated.

Site Specific Plans

To provide the path to immunity designated in the law, contractors or owners who propose use of NOA material in or from an NOA Area must submit a site specific plan to the DOT&PF containing at a minimum:

- Plans, Specifications, and material quantity estimates for Construction approved by Property owner and signed by Designer of Record. Plans must identify locations and depths of NOA material to be used, and non-NOA material that will cover the NOA material;
- Description of project, project components, and intended long term use of project;
- Sampling and Analysis Plan (SAP) including investigations to identify sources of non-NOA material in the area;
- Asbestos Compliance Plan (ACP) for Construction Activities;
- Dust Control Plan (DCP) for Construction Activities;
- Operations & Maintenance Plan (OMP) – Instructions to Owner or Owner's Representative;

To avoid delays in construction, it is recommended that Owners/Contractors provide ADOT/PF all of the components of the Site Specific Plan at least 60 days prior to ground disturbing activities. The OMP can be submitted in DRAFT with the final submitted after construction is complete.

If the quantity of NOA material on the project exceeds 10,000 yards, the Sampling and Analysis Plan (SAP), the Asbestos Compliance Plan (ACP), the Dust Control Plan (DCP), and the Operations and Maintenance Plan (OMP) shall be signed by a Certified Industrial Hygienist (CIH) certified in Comprehensive Practice by the American Board of Industrial Hygiene, and submitted to the Engineer for review and acceptance at least 60 days prior to beginning work.

SAMPLING AND ANALYSIS PLAN

For Owners/Contractors seeking to utilize NOA material on projects, and seeking immunity under Alaska law as provided in House Bill 258, a Sampling and Analysis Plan (SAP) must be submitted to the DOT&PF 30 days prior to beginning ground disturbing activities. The SAP must include the following:

- Test Results of soil samples from known material sources or areas of anticipated ground disturbance identifying NOA concentrations, including mapped locations;
- Description of NOA testing protocols used;

- Description of NOA sampling protocols used;
- Extent of exploration of available material sites in project area;
- Narrative on benefits to using NOA material on project;
- Alternatives to using NOA material on project, including cost differences from using NOA material.
- Description of methods to minimize use of higher concentrations of NOA material;

ASBESTOS COMPLIANCE PLAN

The Owner/Contractor shall prepare and implement a project specific asbestos compliance plan (ACP) to prevent or minimize worker exposure to asbestos. The ACP shall be in conformance with Mining Safety Health Administration (MSHA) requirements, the Occupational Safety and Health Guidance Manual published by the National Institute of Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), including addenda issued up to and including the date of the project review by ADOT&PF.

The Owner/Contractor shall include in the ACP:

A. Identification of personnel designated to be on site,
B. A job hazard analysis for work assignments,
C. A summary of potential risks,
D. A worker exposure air monitoring plan,
E. A description of personal protective equipment,
F. Delineation of work zones on the job site,
G. Decontamination procedures,
H. General safe work practices,
I. Site security measures,
J. Emergency response plans, and
K. A description of worker training (Ref: Alaska Statute 18.31.200 and 18.31.500),
L. Description of public notification regarding use of NOA material, including proposed signage to be placed near project area.

DUST CONTROL PLAN

A Dust Control Plan (DCP) shall be submitted to the ADOT/PF before beginning work on projects disturbing NOA material. The Owner/Contractor shall prevent visible dust emission during excavation, stockpiling, transportation, or placement of material containing NOA material. The Owner/Contractor shall control dust in areas with material containing NOA material using measures that include the following:

A. Unpaved areas subject to vehicular traffic shall be stabilized by being kept adequately wetted, treated with a chemical dust palliative, or covered with non-NOA material;
B. The speed of vehicles and equipment traveling across unpaved areas shall be no more than 15 mph unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment going faster from causing dust that is visible crossing project limits;
C. Stockpiles and disturbed areas not subject to vehicular traffic shall be stabilized by being kept adequately wetted, treated with a chemical dust palliative, or covered with non- NOA materials, or covers; and
D. Activities shall be conducted so that no dirt or mud tracking is minimized on roadways open to the public.

OPERATIONS AND MAINTENANCE PLAN

An Operations and Maintenance Plan (OMP) will provide the following:

1. As-built plans identifying the final locations for NOA material, cover material used;
2. Narrative describing reasons for changes during construction to NOA material, locations, and coverage;
3. Recommended operational and maintenance strategies and timelines for the Owner in protecting and reconstructing coverage materials over the NOA material;
4. Recommended public notification measures for the Owner to ensure the public is made aware of NOA materials in the area;

Prior to construction, the Owner/Contractor shall submit a DRAFT OMP including items #3 and #4. Within 90 days following construction completion (or beneficial use/occupancy by owner, whichever is sooner), the Contractor shall submit a FINAL OMP to ADOT/PF with all required items.

These are interim guidance and standards, and are subject to revision.

Department of Transportation & Public Facilities
Best Practices for the Use of
Naturally Occurring Asbestos (NOA)

Excavation, Grading or Utility Work at Construction Projects

- Wet road surfaces with water using trucks, hoses, or sprinklers[1]
- Pre-wet the ground to the depth of anticipated cuts[1]
- Apply water prior to any land clearing[1]
- Implement measures to ensure that material being excavated, crushed, screened, loaded, transferred or conveyed does not result in any dust that is visible crossing the property line[1]
- Control for disturbed surfaces areas and storage piles that will remain inactive for more than seven (7) days, which should include one or more of the following:
    - wet piles of excavated material
    - application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations
    - cover them with tarps, plastic sheeting, or vegetative cover
    - installation of wind barriers of fifty (50) percent porosity around three (3) sides of a storage pile
    - installation of wind barriers across open areas[1]
- Continuously mist the work area[1]
- Suspend grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures[1]
- Install wind barriers around the work area[1]
- Clean or decontaminate equipment and vehicles to ensure that no equipment or workers track soil out of the work area; track out prevention measure may include:
    - a gravel pad
    - tire shaker
    - wheel wash system may be used to clear soil from vehicles
    - Pavement extending for not less than fifty (50) consecutive feet from the intersection with the paved public road[1]
- Visible track-out must be cleaned using wet sweeping within twenty-four (24) hours[1]
- Wet the work area using a spray system attached directly to rock cutting or drilling equipment, such as a fine-mist sprayer or a variable-rate fogger nozzle (similar to those used in firefighting)[2]
- Excavate utility trenches to an adequate depth and backfill them with clean soil so that future repair work will not need excavation into potential NOA-containing materials[3]
- When transporting NOA-containing materials, avoid overloading trucks; keep the material below the top of each truck compartment and cover material with a tarp[4]
- Limit personnel and vehicle access to the work area[5]
- Identify NOA-containing areas with signs[2]
- Limit vehicle speeds on the site to fifteen (15) miles per hour or less[1]
- Reduce drilling or excavating speeds[6]
- Excavate during periods of calm or low winds[1]
- Clearly delineate the regulated area with barrier tape imprinted with appropriate warning labels[6]
- Post construction stabilization of disturbed areas:
    - establishment of a vegetative cover
    - placement of at least three (3.0) inches of non-asbestos containing material
    - paving[1]

Roads and Parking Areas (unpaved and gravel roads)

- Cover roads with non-NOA-containing rock, chemical sealants or dust suppressants, chip seals, limestone aggregate, petroleum sealants, or asphalt cement paving[1, 7, 8]
- Separate NOA containing rock and non-NOA containing rock with geotextile[12]
- Wet road surfaces with water[1]
- Install windbreaks or berms[1]
- Reduce driving speed[1]
- Avoid dusty areas, especially in windy conditions[1]

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List of Acronyms

ARB Air Resources Board
ATCM Airborne Toxic Control Measure
DTSC Department of Toxic Substances Control
ICs institutional controls
NOA naturally occurring asbestos
USGS U.S. Geological Survey

http://www.epa.gov/superfund/health/contaminants/asbestos/pdfs/noa_factsheet.pdf

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