June 5, 2018

Grant Pfeifer  
Regional Director, Eastern Regional Office  
Washington Department of Ecology  
4601 N Monroe Street  
Spokane, Washington 99205-1295

Dear Mr. Pfeifer:

PacWest Silicon, Inc. (PacWest) proposes to construct and operate a silicon manufacturing facility at a site near the city of Newport, Washington, in Pend Oreille County. Because the proposed project will be required to obtain licenses and/or permits from one or more agencies (as defined in WAC 197-11-714), the project is subject to review under the State Environmental Policy Act (SEPA).

Typically, the SEPA process is launched when the project proponent (applicant) submits an application for a license or permit to an agency, which is accompanied by a SEPA Checklist (“Checklist”). The Checklist is used to determine whether significant adverse impacts from the project are likely, referred to as a “threshold determination.” If the threshold determination indicates that significant adverse impacts are likely, an Environmental Impact Statement (EIS) is required.

PacWest wishes to accelerate the SEPA process by launching the public scoping process for an EIS prior to submitting any applications for licenses or permits. Per WAC 197-11-315(1)(b), agencies are not required to use a Checklist to make a threshold determination when the lead agency and the applicant agree that an EIS will be prepared for the proposed project. In this case, the Washington Department of Ecology (Ecology) is the lead agency, as established in the October 10, 2017 letter from the Pend Oreille County Board of Commissioners to Maia Bellon of Ecology. Based on discussions with Ecology, PacWest believes that the lead agency (Ecology) and the applicant (PacWest) are in agreement that it is appropriate to prepare an EIS for the proposed project. As a result of this agreement, the remainder of this letter provides a description of the proposed project that is intended to inform the public scoping process.

The proposed project site is approximately 188 acres, located approximately 1.6 kilometers (km) from the center of Newport (see attached figure). The proposed facility would occupy approximately 70 percent of the property, and consist of several sheet-metal clad buildings, the tallest of which would be 157 feet above grade. The site has been previously used for logging; there is one unpaved, winding road that traverses the site, and has been used as an access road. The site is surrounded by undeveloped or previously logged/forested land, except for the two existing farms/residences just south of the site. The area is currently hilly, with the steepest slope around 15 percent; the site would be graded to reduce the steepest slope to 2 to 3 percent. On-site structures are not expected to impact
views from neighboring properties, which are blocked by either higher ground or trees, and no lighting or glare issues, either on-site or off-site, are anticipated.

As proposed, the facility would receive quartz, Blue Gem coal (a low-sulfur, low-ash, high-reactivity coal found only in southeastern Kentucky and central Columbia), charcoal, and wood, and would produce 99-percent-pure silicon metal from those raw materials using electrically-heated, semi-enclosed submerged-arc furnaces (SAFs). All raw materials would be brought to the site by rail, except wood chips, which would be delivered by truck. Product would be removed from the site by rail or truck, as determined by the customer. The silicon metal produced at the facility would be sold to various industries, with 50 percent of production earmarked for solar cells. Constructing the plant would create up to 400 construction jobs over a 2-year period, and the operating facility is expected to employ up to 150 people, and is estimated to create over 750 indirect jobs. Governor Inslee designated the proposed facility a Project of Statewide Significance in August 2016.

The facility would include a rail loop for unloading trains delivering quartz (approximately 170,000 tons per year), Blue Gem coal, and charcoal (approximately 150,000 tons per year of coal and charcoal, combined), as well as a truck dump area for wood chip deliveries (approximately 130,000 tons per year). Received raw materials would be stored in enclosed areas, except for wood chips, which would be stored outside. Raw materials would be reclaimed from storage piles by front-end loaders, which would load the materials onto conveyors. The covered conveyors would deliver raw materials to day bins, which meter out appropriate quantities of raw materials to weigh belts that deliver the raw materials to the SAFs.

PacWest proposes to use 2 SAFs to produce approximately 73,000 tons of silicon per year. To make silicon, SAFs are heated to greater than 3,000 °F by three carbon electrodes. The molten silicon produced in the SAF is tapped into heated ladles, which pour into forms to cast ingots. Ingots are stored and/or broken up, crushed, and sized according to customer specifications. Fumes and dust generated by the furnace, tapping operations, and casting operations are cooled and passed through filters. The material captured by the filters is comprised mainly of silica, which is packaged and shipped off-site for use as a concrete additive.

The facility is expected to emit regulated air pollutants, including criteria pollutants, hazardous air pollutants (HAPs), toxic air pollutants (TAPs), and greenhouse gases (GHGs) to the atmosphere. Annual emissions of at least one criteria pollutant is expected to exceed the prevention of significant deterioration (PSD) major source threshold (250 tons per year), which makes the project subject to review under Washington’s PSD program, which is implemented by the Washington Department of Ecology (Ecology). Key among the requirements of PSD review are to employ best available control technology (BACT) to reduce emissions from all new sources of emissions, and to demonstrate that ambient air quality standards will not be exceeded as a result of the project. The facility is expected to consume electricity, and to generate GHGs, but it should be noted that at least half of the silicon
produced is expected to be used in the creation of solar cells that would generate carbon-free electricity.

The facility is expected to generate approximately 200 passenger vehicle trips per day, and up to approximately 50 commercial and non-passenger vehicle trips per day, for a total of approximately 250 vehicle trips per day. Access to the site is currently very limited; the project would include a new road to allow vehicle access. Among the alternatives under consideration is a road that would connect the site with US Highway 2. On-site roads would be paved, and designed for use by cars, bicycles, and pedestrians. The parking lot at the facility would have approximately 150 spaces. The site is not currently served by public transit, and such a service is not expected when the facility is under construction or in operation. The nearest access to public transit is in Newport.

A proposed rail spur would connect the facility site with existing tracks, and an onsite rail loop would be used to hold the trains while cars containing raw materials are unloaded. Unloading operations would occur only between 7 AM and 10 PM; the number of rail cars unloaded per day is expected to range between 0 and 100, with an average of approximately 10 per day. An average of approximately 5 rail cars would be loaded with product, either silicon metal or silica captured by the filter control system, and shipped off-site each day. In-bound and out-bound rail shipments are expected to occur throughout the year. Loading and unloading activities would be covered and fugitive dust would be mitigated by suppression systems. A switching locomotive would be available onsite to coordinate rail movement as needed.

Vehicular and rail traffic to and from the site, as well as on-site equipment and processes, are expected to introduce new noise sources to the surrounding environment. The facility would be designed, constructed, and operated in compliance with all applicable noise limits at all times. Noise analysis will be used to quantify expected noise levels at the nearest sensitive receivers to the site, and, if necessary, to identify and assess noise mitigation measures to ensure the facility can comply with the applicable noise limits.

The proposed site of the facility is not located within a shoreline area, is not located in a 100-year floodplain, and the nearest bodies of water are the Pend Oreille River (approximately 1 mile away) and the Spokane River (approximately 3,000 feet away). Water used by the facility would be provided by the City of Newport; usage is expected to be less than 10,000 gallons per day. The facility would also be connected to the City of Newport’s sewer system, so no wastewater would be discharged to surface waters or into the ground. Stormwater runoff would be collected in a retention pond and used to fulfill process needs, for on-site dust control, and to keep the wood chip pile saturated with moisture.

Currently, the proposed site is not serviced by any utilities, so all necessary utilities would be added for the project. As mentioned above, the SAFs would be heated using electricity provided by the Pend Oreille Public Utility District. In addition to providing water and sewer, as discussed above, the City of
Newport would also provide telephone service to the site. Process consumables, such as nitrogen and oxygen, and fuels such as diesel and propane, would be delivered by local providers.

The new facility would require fire protection, police protection, and emergency services. To mitigate the need for police protection, the facility property would be fenced and would have security personnel on the premises at all times. The need for fire protection would be mitigated by the presence of an on-site fire suppression system. To reduce the need for emergency services, the facility would maintain compliance with all federal and state Occupational Safety and Health Administration (OSHA) regulations, provide health and safety training to all employees, staff trained first aid specialists on each work shift, and develop a risk management plan (RMP) to guide responses to accidents or accidental spills that could be a hazard to the environment or people. The need for additional services such as schools and health care may increase if the population of Newport increases as a result of the project. The proposed project does not include any housing, no one would reside at the facility, and the facility would not create or displace any recreational opportunities or activities in the area.

A preliminary anthropological survey, that included a three-day archeological survey with 15-30 shovel probes and review of appropriate historical maps, surveys, and GIS data, was conducted at the proposed project site in December 2017 to identify potential cultural resources. No cultural or historic resources were discovered at the site. However, because the site was largely covered in snow at the time of the initial survey, an additional survey has been scheduled.

Vegetation at the proposed site currently consists of coniferous trees, shrubs, and weeds. Houndstongue (Cynoglossum officinale), a Washington State Class B noxious weed, was found on the site during a site survey. On-site vegetation would be removed from building footprints, and to accommodate access roads, and an ongoing weed control program would be implemented. Native tree species would be planted on the peripheries of the property where possible to enhance the vegetation of the site. Animals observed during a site survey include: ravens (Corvus corax), bald eagle (Haliaeetus leucocephalus), pileated woodpecker (Dryocopus pileatus), white-tailed deer (Odocoileus virginianus), and coyote (Canis latrans). Additionally, a Townsend’s big-eared bat communal roost site was documented south of the property. The site is not part of a known animal migration route, and no wetlands have been identified.

Only five threatened or endangered species have been listed in Pend Oreille County: Bull trout (Salvelinus confluentus), Canada lynx (Lynx Canadensis), Grizzly bear (Ursus arctos horribilis), Woodland caribou (Rangifer tarandus caribou), and Ute ladies’-tresses (Spiranthes diluvialis), and none of these have been observed in the area. As mentioned above, Townsend’s Big-eared Bat was observed in the area, but is currently only a Washington State Candidate Species for listing and the roost is not located onsite. Because the initial survey was conducted in the winter, additional surveys have been scheduled to ensure that species of interest are fully catalogued.
We look forward to working with Ecology to develop a thorough and robust scoping process. If you have any questions, please do not hesitate to contact me at 509/550-0303.

Sincerely,

Jayson Tymko
President/CEO
PacWest Silicon