

August 30, 2024

Mr. Rob Malcomson Senior Engineer Stantec Consulting Services Inc. 11311 Aurora Avenue Des Moines, Iowa 50322-7904

Dear Mr. Malcomson:

We have reviewed the information provided regarding the proposal by Stantec Consulting Services Inc. for the use of ORC Advanced® to promote microbial population growth and aerobic biodegradation of the contaminants in the groundwater at Interstate Power and Light Company's former manufactured gas plant site (CERCLA Site ID: IAD980969190, UIC Facility ID: IAS033260001), Mason City, IA. The emplacement of these materials into the subsurface, as included in the CERCLA approved remediation plan, is regulated by the Environmental Protection Agency's Underground Injection Control Program. EPA Region 7 UIC Program requires that authorization be obtained prior to commencing injection activities in Iowa and Tribal Lands within Region 7 to ensure the protection of underground sources of drinking water. Aquifer remediation injections fall within the Class V injection well category and can operate as either rule authorized, or under conditions of a permit. The decision to require a permit is based on the following criteria: whether the injectate could cause a violation of the Primary Drinking Water Regulations under 40 CFR § 141 or otherwise adversely affect the health of humans; the duration of the project; frequency of injection; and the volume of fluids to be injected. However, since the proposed injection activities are occurring as part of a CERCLA approved remediation plan, permitting from the Region 7 UIC Program is not required but approval by rule authorization from the program is still required under the permitting equivalency process.

Based on the information provided, the injection/emplacement of ORC Advanced® to encourage remediation via aerobic biodegradation at the site should not result in an adverse impact to any underground sources of drinking water or otherwise adversely affect the health of humans. Therefore, the Region 7 UIC Program has determined that the proposed 19 injection points to emplace a slurry of approximately 299 gallons using approximately 920 pounds of ORC Advanced® at the site via direct-push technologies will be allowed to operate as Rule Authorized under 40 CFR § 144.24. If surfacing occurs during the emplacement of remediation materials into the interval designated in the Work Plan, injection into the well is to be halted and adjustments made to the injection rates at all remaining

injection wells to prevent additional surfacing from occurring. Any materials which have surfaced (either during the well installation or emplacement of remediation materials) will need to be contained and not allowed to migrate off-site. These injections/emplacements will be covered under the existing EPA UIC facility ID number of IAS033260001 that was issued to the site in 2014 during the previous corrective action effort utilizing a pump-and-treat system. Also, please note that the Region 7 UIC Program has only approved the one treatment event as described above at this time.

By the authorities granted under 40 CFR Section 144.27, we are also requesting that the results of all groundwater monitoring and copies of any reports and notifications required by the Iowa Department of Natural Resources be submitted as the project progresses to the Director at the following address:

Attention: Iowa UIC Program Coordinator
Groundwater and Drinking Water Branch
Water Division
U.S. EPA - Region 7
11201 Renner Boulevard
Lenexa, KS 66219

Alternately, electronic versions of any reporting required above or other correspondence related to this site may be submitted to the following email address: R7 UIC Program@epa.gov

All required reporting or other correspondence should reference the UIC facility ID number, site name, address, and IDNR facility or registration number. The authorization by rule for this operation automatically terminates due to any failure to comply with the above requirements or if the Agency learns of or suspects that operations have adversely impacted an underground source of drinking water or otherwise adversely affected the health of humans.

While the Region 7 UIC Program has approved this injection activity, this does not preclude the need to coordinate with the IDNR, as per the permitting equivalency process, to ensure that they would also approve the proposed treatment methodology.

While a UIC permit was not required for this project, the Region 7 UIC Program needs to be made aware of any additional projects your firm will be conducting in Iowa or Tribal Lands in Region 7 involving injection wells at least 30 days before commencing operations so a determination on the necessity of a permit can be made. Any injection of materials into the subsurface in Iowa that is done without prior approval from the EPA is considered an unauthorized injection and is subject to up to \$10,000 per day per violation in penalties.

Please contact Ben Meissner (email: Meissner.Benjamin@epa.gov or phone:913-551-7992) or Marina

Mahler (email: Mahler.Marina@epa.gov	\underline{c} or phone: 913-551-7008) should you have any questions on
this decision and its requirements or any	y other UIC related issues.

Sincerely,

Neftali Hernandez-Santiago Supervisor Groundwater and Drinking Water Branch

cc: Jill Stevens, IPL